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THE EARLY HISTORY OF MEDICAL EDUCATION IN NEW ORLEANS

THE CENTENNIAL OF MEDICAL EDUCATION IN NEW ORLEANS*

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NEW ORLEANS

This is the one hundredth year of medical education in our great city and also the one hundredth year of the existence of the school of Medicine of Tulane University.

Can we by commemorating this epochal event exaggerate the debt we owe to the pioneers, who a century ago were the founders of the first school of medicine here in New Orleans and in the Southwest? Can we be too profuse in their praise? Can we be too laudatory of their deeds? Can we be too expressive in our admiration for their vision, their erudition and their love of humanity? And can we be too devout in our veneration for that nobility of character which typified their greatness?

I feel that you will bear with me when I assert that we, their successors, their beneficiaries, would have been not only remiss in our duty, but would be even ungrateful, had we neglected that golden occasion, because of all our historical jubilees, there is not one which should be celebrated with greater spirit, more reverence and with more hearty enthusiasm. Can we not then with infinite exultation and justified pride point to their courage, recall their tribulations, admire their pertinacity and glorify their achievement?

This day, one hundred years ago, inaugurated the opening lecture of the Medical School of Louisiana.

That institution was founded at a time of dire calamity, when none but the stoutest of heart and of most robust constitution could survive the ghastly devastation of ever recurring pestilences.

Whilst it is true that the college partook largely of the prosperity of this city and surrounding country, it must be said that it surmounted periods of greatest stress, of world-wide depression, of the invasion by a conquering host, and of the agonizing days of reconstruction; in fact, it not only resisted the ravages of time, but despite all, it prospered and achieved great renown. The retrospect is full of distinction, honor and glory.

Because of the learning of its graduates, the erudition of its professors, its scientific and literary achievements, it has reached the highest pinnacle of fame among the great institutions of learning not only in the Southland but throughout the vast expanse of these United States.

Let us look at the city of a hundred years ago which called your university into existence!

New Orleans previous to the advent of the nineteenth century was of slow growth. During the French and Spanish domination it was only a small town. Its commerce was very limited and its population consisted mostly of French and Spanish settlers and their slaves. But even at that time it had acquired an enviable distinction because of the refinement and culture of its people. But it was only a few years after the Louisiana Purchase that the attention of the world was focused on New Orleans. Its population then, not only doubled but trebled in a very short while.

Among the many factors which contributed

*This and the succeeding two papers were presented at the meeting of the Orleans Parish Medical Society, January 7, 1935, in celebration of the Centennial of Medical Education in New Orleans.

to this phenomenal growth must be mentioned its strategic situation at the mouth of the great Mississippi river, the advent of the steam boat, the trans-Appalachean migration, and the political upheavals in Europe.

New Orleans was then the most cosmopolitan city in the world.

It progressed in spite of the insalubrity of its soil and the frequent occurrence of deadly epidemics. Yearly thousands of intrepid emigrants, in their quest for gold, braved not only dire privations but died in this, the City of the wet grave, where the hopes of thousands were buried.

During the 1830's New Orleans enjoyed the greatest development in its history. Its rise phenomenal. Its harbor was congested with among the great centers of the universe was steam boats and with sailing vessels flying the flag of every nation. It was then predicted that New Orleans would surpass New York in its commerce and in its population. Withal, our city was the pest hole of the world. Its mortality was apalling.

Could there have been a period in the history of our city more propitious to the highest interest of mankind than that at which the existence of our college commenced?

On the evening of September 29, 1834, in the advertisement columns of the Bee appeared in the French and English languages the prospectus of the Medical College of Louisiana, announcing the opening lecture to take place on the first Monday of January, 1835. This unexpected announcement created a furore in the city. It was the principal topic of conversation. It provoked acrimonious discussion not only among members of the medical profession, but among the educated public as well. The necessity for the *modus procedendi* for the formation of the new school, as well as the personalities and the qualifications of the members of the faculty were the subjects of controversy in the home, in the streets, on the exchanges, in the coffee houses and in the newspapers.

The announcement of a faculty composed exclusively of English speaking physicians, many of whom had only recently arrived in the city, incited expressions of censorious and rancorous opinions. Many communications from polemics appeared in the press voicing strenuous objections to the establishment of a college without first procuring the sanction of the Legislature or the authorization of Congress.

It was also evident that the idea of the "self-appointment of the professors" was distasteful to many members of the local profession.

The very youth of many of the teachers was bitterly criticized.

But we would not be so amazed by the unseemly opposition to the establishment of the much needed medical school if we recall the conditions prevailing at that time. Curious reasons for such bitter hostilities were the acute rivalry, social prejudices and factional resentment existing between the French and English speaking physicians. The population of the city was then divided into two classes, absolutely distinct and different as to their language, their customs, their religion, their morals and their society. One was composed of the Creoles, or the indigenous portion of the population and recently emigrated Europeans, and the other of Americans from every state of the Union. Canal street was the dividing line, the lower portion was inhabited by the former and the upper section by the latter. They were equally jealous of their prerogatives. There was a continuous conflict for supremacy. Can we wonder then that many of the French speaking physicians should look with distrust and misgiving upon the founding of a college of medicine by beardless young men new arrivals in their city? Consequently, in the contemporary newspapers, strong opposition was voiced to its establishment, both in the French and English languages.

It was argued that the college was started without legal authorization. That the professors should have been appointed only by the government or by a university. That the requirement for the professorship should have been a doctorate in medicine from one of the principal faculties of the country. That it was of utmost importance that only the most learned professors should have been appointed. That the chairs should have been allotted only after a competitive examination before one of the leading faculties in the Union, or by physicians who were already graduates from one

of these faculties, or from one of the renowned universities of Europe. That these professors should have been at least thirty years old because they could only then command as much experience as knowledge. And also because not a Creole or European physician had been extended an invitation to sit in their faculty.

When the opposition discovered that they could not prevail against the steadfast determination of these young men, the founders of the medical college, their point of attack was shifted against the proposed curriculum. It was discussed, criticized, scrutinized, investigated and dissected whenever and wherever doctors met. The status of primary education and the appropriate scholastic foundation for the study of medicine were debated. The fact was also deplored that the colleges then established in New Orleans did not teach philosophy and but few of the humanities. The founding of a college where the classics and philosophy would be included in the courriculum was also proposed.

In the Bee of October 18, 1834, there appeared an anonymous communication written in French by a propounder of a higher standard of medical education which is most interesting. He submitted a plan far in advance of the requirements of the colleges of the time in this country. A course of four years, the first of which would be premedical was suggested. This course was to be opened only to students who were proficient in the classics and who were prepared for the study of philosophy, which was to be taught in French. The medical course for that year was to be limited to anatomy, physiology, chemistry, hygiene and medical physics. On the completion of the first term the students would pass a public examination, and those "whose merits and application deserved the confidence of their professors would be entrusted with the teaching of the new students." During the second year internal pathology, botany, operative medicine and even pharmacy were to be taught. In the third year special attention would be given to operative medicine, external and internal clinics, external and internal pathology. The fourth or graduating year would comprise internal clinics, medical history, internal pathology, medical jurisprudence, clinics and obstetrics. He then expressed the hope that some day this course of medicine will be given to the Creole students in the Medical College of Louisiana.

It is needless to say that such an idealistic plan of medical education fell on deaf ears. It was far beyond the time. Unfortunately, the anonymity of the writer remains even to this day.

The younger members of the profession carried away by their undaunted enthusiasm, glorified its founders and predicted for the college a great future. The more matured and gray headed practitioners shook their heads, and although they acknowledged the necessity for such an institution, they feared that there would not be a sufficient number of students, from the standpoint of education, qualified for the study of medicine. They ambitioned a college which would cast honor on the State of Louisiana by graduating physicians the equal in learning, distinction and culture to those of the greatest centers of medical lore in Europe. They not only prayed for a higher standard of medical education but offered suggestions which, from their experience, they felt would prove most advantageous to students of medicine.

All these difficulties and obstacles, and there were many, tested to the very limit their capacities of resistance. The great impediments they surmounted added to their undying glory.

All honor, then, to the renowned memory of these youthful founders and first professors of the Medical College of Louisiana, the first in the Southwest . . . Doctors Thomas Hunt, John Harrison, Charles A. Luzenberg, J. Monroe Mackie, Thomas R. Ingalls, Augustus Cenas, and Edward H. Barton.

It was their undaunted ardor, their overwhelming love of profession, their steadfast determination, their unflagging spirit to conquer no matter how nearly overwhelming the odds, their initiative and their daring, which surmounted dissensions in their own ranks as well as the untiring opposition of obstructionists.

They built well, for, from this modest beginning, without money and without endowment, this college, without even a domicile, with only eleven matriculates, grew to become a great temple of learning, whose influence is reflected throughout the four corners of the universe.

The first lecture was delivered by Dean Hunt, on the 5th, the first Monday in January, 1835, to eleven students and a few sympathetic friends. It was a masterly address which attested the culture, the lofty aims, the superior capabilities and the high scientific attainment of a great teacher. The following passage of that historic discourse merits repetition. He said:

> "There is no mystery about science. Truth is simple and reveals her doctrines in a language intelligible to every mind. She affects no air of pedantry, and decrees it inconsistent with her vocation to annoy and perplex the learner with far-fetched and uncouth terms. To my mind, there is a moral sublimity in the picture of a learned and philantrophic man, conveying the lessons of wisdom and experience, in the beautiful language of simplicity, to an acquiring and intelligent student."

As the college did not even have a domicile, some of the lectures were delivered at the homes of the professors, others in a hall No. 41 Royal Street, and twice a week the classes met in the wards of the Charity Hospital. The course was for two years; the sessions were for four months.

The first course of lectures ended on April 27, 1835.

The professors were highly commended, and it was stated that the classes were well attended by the students as well as by respectable persons of both sexes.

On the second day of April of that year the college was granted its charter by the Legislature of the State of Louisiana.

That act provided also for the incorporation of the Medical College of New Orleans and stipulated that the two colleges would have the same rights and privileges.

The competitive school of medicine never materialized. Edivently its promoters realized the futility of such an institution in a community which was rapidly increasing in its English speaking population. The prospective faculty embodied Creole and European doctors, among whom were some of the most distinguished, learned and cultured physicians in the South.

During its very first year, the existence of the Medical College of Louisiana was threatened by dissensions. Doctor Hunt, its founder, its chief promoter and its first dean, whose erudition was well established and whose ability as a professor was highly respected, resigned not only the chair of anatomy but also the deanship. We can only surmise that only a very grave provocation would have impelled Doctor Hunt to take such a drastic step. Doctor Luzenberg succeeded him in the deanship.

It was customary for the professors, through the medium of the press, to extend to the ladies and gentlemen of the city an invitation to hear their opening lectures. The public also, on the payment of a small fee, were permitted to attend the classes intended for medical students. The advertisement columns of the French and English sections of the contemporary newspapers were replete with these solicitations couched in words most flattering to the professors.

A most interesting and may I say a most amusing personage was Doctor A. Byrd Powell, professor of Chemistry. He succeeded Doctor Ingall who resigned that chair after the first session. Dr. Powell was an itinerant lecturer on phrenology. He heralded his arrival in this city with a fanfare that immediately drew attention to his bombastic personality. He evidently must have been a gentleman with engaging manners, a convincing speaker, a skillful fanfaron, for with his cajolery he ingratiated himself in the good graces of the most influential element of the people of New Orleans. His lectures on phrenology were evidently well received because they not only drew flattering newspaper comment, but impressed most favorably even learned and distinguished men. Among these were the Honorable Henry Bullard, the lettered and renowned Justice of the Supreme Court of Louisiana, and the founder of the Louisiana Historical Society, Doctor E. H. Barton, one of the professors of the Medical College, and the renowned Divine Reverend Clapp. These gentlemen were loud in his praise. They extolled his wisdom and publicly expressed their conviction that phrenology was an interesting branch of human knowledge. They highly complimented him by proclaiming their ardent attachment to his enlarged view of philosophy.

With the earnest support of such influential citizens, it was inevitable that Doctor Powell should be soon elevated to the chair of Chemistry, then vacant. His tenure was short, only

one session. But little is known of Doctor Powell today. Why he left New Orleans, whence he came, wither he went, what became of him we do not know. Let us dismiss him with a smile on our lips and charity in our heart. *De mortuis nil nisi bonum.*

The Medical College of Louisiana during the first ten years of its existence had a slow growth. Although there was a slight yearly increase in students, the matriculation remained small. The graduates seldom exceeded ten in number. Only sixteen young men registered for the second session.

The first graduating exercises took place in the Congregational Church in Saint Charles street at four o'clock in the afternoon of April 5th, 1836. It was a solemn occasion. The ceremony was graced by the eloquence of the distinguished orators, the Honorable Henry H. Bullard and Mr. George Eustis. The Dean of the Faculty, Doctor Luzenberg, delivered a masterly oration in Latin, which was said to be in conformity with a custom more honored in the breach than in the observance. The degree of Doctor of Medicine was conferred on the following gentlemen: Messrs. M. M. Carpenter, R. S. M. A. Delatule, Alphonse Delavigne, Walter Fosgate, Alexander Hart, Albert Simon Kostki, Ogden D. Longstaff, John C. Lawhon, John H. Lewis, F. J. Romer, and Cornelius Traweek.

They have the distinction of being the first graduates in Medicine of our great university.

It was not until the end of the year 1840 that the college acquired a domicile. It was a modest building in the immediate vicinity of the Charity Hospital. This site at that time was considered to be comparatively retired. Then for the first time the lectures were held under one roof. It was only at the end of the first decade of its existence that it gained the official recognition of the State of Louisiana. A portion of the Capitol Square, measuring 120 feet square, at the cornor of Common and Phillipa, now University Place, was granted to the Medical College of Louisiana, by an Act of the State Legislature, on which to erect a suitable edifice. The site was immediately in the rear of the State House, which formerly had been the Charity Hospital, then located on Canal Street, between Baronne and University Place.

This building was erected at a cost of $15,000.00. It was the home of the Medical College until the year 1847. In that year the college removed to a larger and more commodious building, built for its purpose on an adjoining site. The former structure then became the domicile of the Law Department of the University of Louisiana.

It was claimed that the new home of the medical school was one of the largest and best arranged for the teaching of that art in the United States. Its architecture and size were imposing. Its dimension was 100 feet front by 104 feet in depth. It contained three large lecture rooms, capable of accommodating 600 students; a large hall for a museum; several large dissecting rooms; and the necessary number of private offices for the professors.

In 1845 the success and fame of the college actuated the Legislature of the State of Louisiana to establish by a constitutional act a University in New Orleans to be named the University of Louisiana, and constituted the Medical College, as then organized, its Medical Department.

The Medical College of Louisiana was destined to become one of the greatest institutions of its kind in the United States. Its first ten years were hectic ones. The number of its students was small. Its very existence was not only continually threatened by the animosities and jealousies of many of the most influential members of the local profession and by racial prejudices which were so strongly intrenched in the population of the city at that time, but by dissensions as well. But withal, its fame extended throughout the South. Not only students, but practitioners of medicine came hither, attracted by the superior facilities for the teaching of clinical medicine in the Charity Hospital and by the unquestionable high scientific attainments of its teachers.

The increase in the number of its matriculates was rapid and steady. Ninety-three students, of whom fifteen were graduates, enrolled for the session of 1845-46, and in 1850 one hundred and eighty-eight, of whom thirty-nine were graduates. In 1859, it ranked the fifth among the medical colleges of the United States. It had then three hundred and thirty-three matriculates and ninety-seven graduates.

The Medical Department of the University of Louisiana was then esteemed by many without reserve the very best medical school in the land. To this day it has not lost a tittle of its high reputation.

Unfortunately, at the height of this unusual success, that great ruinous war between the States broke out. Professors left their chairs for service in the field; students rushed to join the ranks in their respective sections. The University was closed for the duration of the Civil War.

Time would fail me if I attempted to do justice to the memory of all the illustrious men who, during that period, taught or learned wisdom within the portals of that great school. Their deeds, their learning, their attainments, and their humanity not only emblazon a glorious page in the history of a noble profession, but shed lustre on the escutcheon of a great city and an illustrious State.

Our Alma Mater, the School of Medicine of Tulane University, has an heritage of undaunted courage, of incessant labor, of unswerving loyalty, of solid devotion, of true zeal and of real philantrophy. Can we wonder then that through the past century it has achieved great distinction, that its influence and its leadership in things medical have extended over the Southland, and that throughout its existence at no time it has failed to rank among the highest and most renowned colleges in the United States.

Could the generous and immortal souls of the founders of our great University pervade this audience tonight, and could their dignified and majestic lips but speak, how eloquently, how fervently would they exhort us, and how vigorously would they plead with us to carry on their work and to pass unsullied and unviolated to posterity the principles of the great institution of learning they loved so greatly, labored for so assiduously and fought for so dauntlessly. And could their kindly eyes but see the thousands of its students and its numerous palatial halls, how great would be their amazement and astonishment? How pleased and contented would they be in the knowledge that the institution they founded not only achieved great distinction and renown, but that because of its advancement of learning and research it is the most generous fountain of refinement and culture not only in this, the city of their adoption, but in the South.

Could they not then with becoming modesty and infinite truth repeat the words of the immortal bard:

I have built a monument than bronze more lasting
Soaring more high than regal pyramids,
Which nor the stealthy gnawing of the rain-drops,
Nor the vain rush of Boreas shall destroy;
Nor shall it pass away with the unnumbered
Series of ages and the flight of time.

THE SCHOOL OF MEDICINE OF THE TULANE UNIVERSITY OF LOUISIANA

Founders, Benefactors, Deans

C. C. BASS, M. D.
NEW ORLEANS

This is the first Monday in January, 1935. On the first Monday in January, 1835, just one hundred years ago, the first lecture was given in the first medical school in New Orleans, the first in Louisiana and, in fact, the first in the entire southwestern part of the United States. This marked the opening in New Orleans of an institution dedicated to medical education, which has now been in continuous operation for a full century, except for a brief period during the Civil War, when all the man power and other resources of the entire South were required in that devastating conflict. That institution, the Medical College of Louisiana, was founded and organized in the latter part of 1834, but it was not until the memorable first Monday in January, 1835, that the first course of lectures actually began.

Ten years later, in 1845, the University of Louisiana was established in New Orleans by the state legislature and in 1847 the then existing Medical College of Louisiana was incorporated in the new University as its Medical Department.

In 1884 all legal steps were completed and the properties of the University of Louisiana, including its Medical Department, were transferred to the Tulane University of Louisiana. The Medical Department of the Tulane Uni-

versity of Louisiana continued under that name until 1913, when it was changed by the University, to the College of Medicine, embracing the School of Medicine, the Graduate School of Medicine, the School of Pharmacy and the School of Dentistry. Both of the latter two divisions have since been discontinued.

As dean of the School of Medicine, it is my privilege and pleasure to present on this occasion a few of the people and a few of the events which have played important roles in the affairs of this great institution during the past one hundred years of its progress, the centennial of which is celebrated today by the medical profession of New Orleans, represented by the Orleans Parish Medical Society and by the people of this community. The time allotted to me on this program makes it necessary for me to limit myself to the original Medical College of Louisiana, later the Medical Department of the University of Louisiana and now the School of Medicine of the Tulane University of Louisiana.

During this first century of operation 6447 have been graduated with the degree of Doctor of Medicine. Although the Medical College of Louisiana was originally established, and it and its successors have since been promoted and operated especially for the benefit of people from Louisiana and nearby territory, some students have come from every state in the Union and from several foreign countries. Graduates have practised in every state and also, at one time or another, in most of the other civilized countries of the world.

The faculties have included some of the foremost men in medicine in its various branches in this country. Some of them have had national and international renown for their research and scientific contributions to medical knowledge. To attempt to cite even a small proportion of these would take us far beyond the scope of the present occasion.

Members of the faculty and graduates of this school have played an important role in the welfare and progress, especially of New Orleans and Louisiana, during the past century. They always took a large part in the care of the sick and dying during the all too frequent devastating epidemics, of yellow fever especially, and of cholera, plague and dysentery and the ever present typhoid and malaria. Their services were of great value at the time when the causes and modes of transmission of these diseases were unknown, and chaos, demoralization and stampede occurred with the outbreak of every epidemic. But they were of much greater value by reason of their scientific training and experience which enabled these men to evaluate and promote the acceptance and application of the scientific discoveries which tore from these diseases, one after another, their cloaks of mystery and placed their prevention and control in the hands of civilized man. The last one hundred years has seen all these diseases eliminated as a menace to the health and welfare of our fair city, and the faculty and graduates of this school have participated in many ways and on many occasions in the steps leading to this accomplishment.

The history of the founding of the original Medical College of Louisiana and how the fates brought together the three leading figures in its origin, Thomas Hunt, of South Carolina, Warren Stone, of Vermont, and John Harrison, of Washington, D. C., reads like a very fairy tale. Each of them was born in 1808 and therefore was 26 years old in 1834, the year the Medical College was founded.

Hunt graduated in Medicine from the University of Pennsylvania and later studied in Paris; Stone graduated from the Medical School of Pittsfield, Massachusetts, and Harrison from the University of Maryland.

Stone located in Troy, New York, and there had a large experience with an outbreak of cholera which was brought over the border from Montreal. Afterwards he decided to move to New Orleans. He started his voyage from New York to New Orleans on the famous cholera ship, Amelia. Four days out, a terrific storm arose. After it subsided, Stone found twenty-five of the 108 passengers dangerously ill with cholera. The vessel was beached on Folly Island off the port of Charleston. The passengers were landed, the island was quarantined and physicians were sent out from Charleston to treat the sick and to enforce the quarantine. Thomas Hunt was one of them, and because of his previous writings on cholera and the special interest he had taken in it, he was put in full charge, with Stone as his first as-

sistant. Then and there began a friendship which lasted throughout their lives. They became enthusiastic about the possibilities in medicine in New Orleans, including the establishment of a medical college, in which Hunt was especially interested.

Stone came on to New Orleans in 1832, where he found epidemics of both cholera and yellow fever raging. It is said that more than ten per cent of the entire population of the city died during that epidemic from cholera alone. His previous experience with cholera quickly brought him prestige in the community and a position in the Charity Hospital.

Hunt, according to their previous agreement, soon joined Stone and in a short time was appointed as House Surgeon of Charity Hospital.

John Harrison came to New Orleans about the same time. He was also young, very energetic, ambitious and soon joined Hunt and Stone in their plans to establish a medical college here. Hunt resigned his position at the hospital to devote his time to plans for the medical college and Harrison succeeded him as House Surgeon.

Harrison and Stone being in control of the wealth of ideal clinical material at Charity Hospital for bedside teaching, Hunt contacted and secured other physicians of skill and prestige in the community for positions on the faculty. The first prospectus announced the following faculty for the first course to begin on the first Monday in January, 1835:

Thomas Hunt, M. D.
Dean and Professor of Anatomy and Physiology.
John Harrison, M. D.
Adjunct Professor of Anatomy and Physiology.
Charles A. Luzenburg, M. D.
Professor of Surgery.
J. Monroe Mackie, M. D.
Professor of Theory and Practice of Medicine.
Thomas R. Ingalls, M. D.
Professor of Chemistry.
Edwin B. Smith, M. D.
Professor of Materia Medica.
Augustus H. Cenas, M. D.
Professor of Obstetrics and Diseases of Women and Children.

It is recorded that on account of ill health Harrison was unable to discharge the duties of his position the first year and that Warren Stone demonstrated anatomy.

Smith resigned on October 2, 1834, and Edward H. Barton succeeded him and actually filled the first chair of Materia Medica. The names of both Stone and Barton should appear on the list of the founders.

Let us pass on now to another founder of the succeeding institution as we now know it, Paul Tulane. Tulane was born in 1801 near

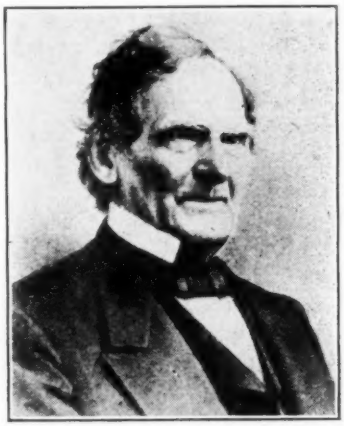

Fig. 1. PAUL TULANE

Princeton, New Jersey. From boyhood he traveled extensively. He developed large business interests and amassed a large fortune as a clothing merchant, much of which was in New Orleans where he lived until 1873, when he removed to Princeton and there died in 1887.

Tulane had seen the need for an institution of higher education for the young men and women of Louisiana, many of whom up to that time were obliged to go to institutions hundreds of miles away. In 1882 he made a gift of more than a million dollars for "the higher education of the white young persons in the City of New Orleans." After two years, during which necessary negotiations, legal procedures and legislative enactment were completed, the properties of the University of Louisiana and all of its departments, including the medical departments, were transferred to the Board of Administrators of the Tulane Educational Fund, thus completing the founding of the Tulane University of Louisiana.

At the beginning and for several years thereafter the lectures were given in public or rented halls about town—41 Royal Street, 239 Canal Street, 14 St. Charles Street, a small house near Charity Hospital, in the homes of the professors, and in Charity Hospital, the new

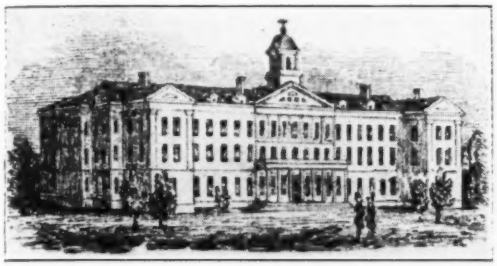

Fig. 2. Charity Hospital. Erected in 1832.

buildings of which had been first occupied in 1832. From that day until this a large part of the clinical and bedside teaching has been conducted in the wards and clinics of that great institution, where there is a wealth of clinical material unsurpassed in kind and quantity on this continent, for the study of the diseases and conditions confronting the physician practising in the South.

In 1843 the first building for the Medical College was erected, at a cost of $15,000 on land owned by the state at the corner of the present University Place and Common Street.

In 1848, after the Medical College of Louisiana had been transferred to, and had become the Medical Department of the University of Louisiana, the state legislature appropriated $40,000 for the erection of a much larger and more appropriate building. The Medical Department

Fig. 3. First Medical College building, corner Dryades (now University Place) and Common Streets.

Fig. 4. Second Medical College building, Common between Dryades and Baronne Streets.

remained in this building, located on Common between Dryades and Baronne Streets, from 1850 to 1893.

After forty years this old building in Common Street had outlived its usefulness and adequacy for a medical college. The need was keenly felt for more space and especially for the laboratory facilities demanded by the advances in medical knowledge and teaching.

In May, 1891, a letter was addressed to the Board of Administrators, signed Ida A. Richardson, approved T. G. Richardson, offering a large donation towards the erection of a new medical college building, if the administrators would provide a suitable site. The offer was accepted and an admirable site was provided, consisting of the Canal Street front of the en-

Fig. 5. Original Richardson Memorial on Canal Street.

tire block between Villere and North Robertson Streets. Dr. Richardson, who had served as dean for twenty years, died in 1892. The building was completed and occupied in 1893 and was named the Richardson Memorial in memory of Dr. Richardson. It was handsome, imposing, well equipped with museums and all laboratories needed at that time, and one of the best medical college buildings in the country. The medical course then extended over a period of three years. Through the original donation made by Mrs. Richardson for this

Fig. 6. IDA A. RICHARDSON

building and large supplemental donations made subsequently, she became one of the greatest benefactors to the Medical Department of Tulane University in its history.

In 1906 the medical curriculum was reorganized, the course was increased to four years, standards of medical education were increased and greater laboratory facilities especially, were demanded. It was decided to remove the first two years of the course to the University Campus on St. Charles Avenue. A large modern and well equipped building was erected there, which then became the Richardson Memorial. All of the instruction in the first two years of the medical course—the pre-clinical subjects—is still given in this building except Biochemstry, which is given in the nearby Science Building, part of the funds for which were given by the General Education Board, of New York, for the benefit of the School of Medicine.

Fig. 7. Richardson Memorial, Tulane Campus.

Mr. Alexander Charles Hutchinson be-

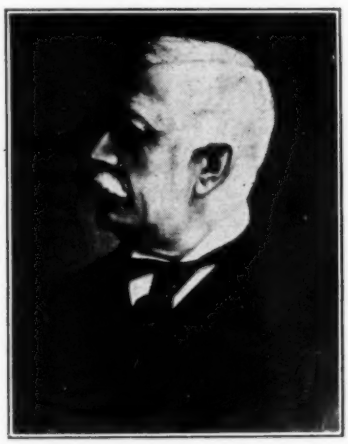

Fig. 8. ALEXANDER CHARLES HUTCHINSON

queathed to the Administrators of the University the residue of his large estate which amounted to more than $700,000 for the benefit of its Medical Department. The purpose indicated was for improvements in both laboratory and clinical facilities and contemplated the establishment of a teaching clinic and, if the amount of the fund permitted, a hospital, as a memorial to his wife, Mrs. Josephine Hutchinson.

After long litigation the estate was finally settled and the building on Canal Street, originally the Richardson Memorial, became the Josephine Hutchinson Memorial. Laboratories were improved, limited clinics were inaugurated and the instruction of third and fourth year students was conducted there, conforming as best it could be done, under the circumstances,

with the purposes of Mr. Hutchinson's bequest. It was always intended, however, to provide a more suitable Hutchinson Memorial whenever circumstances and funds would permit. The opportunity came when the General Education Board gave $1,250,000 for the erection and equipment of a new teaching clinic building to be known as the Hutchinson Memorial. This was appropriate, for it was only because we already had the Hutchinson fund that could be reserved as a source of revenue from which to maintain and operate the proposed new teaching clinic building, that the General Education Board agreed to give the large sum necessary for the erection of the building.

This new Hutchinson Memorial, located on

Fig. 9. New Hutchinson Memorial.

Tulane Avenue just across LaSalle Street from Charity Hospital, was completed and first occupied in November, 1930. The old building on Canal Street has just recently been torn down and the ground has been cleared to be utilized as a source of revenue for the operation of the new one, which conforms perfectly with the wishes and intention of our great benefactor as a memorial for Mrs. Hutchinson.

A great many other benefactors, too numerous to even list here, have given of their means and of themselves, thereby contributing to the accomplishments and progress of the school during this first century. I have cited these two especially, because of the influence of their large gifts upon the present status and future prospect of the school.

Thomas Hunt was one of the founders, in fact the leading or principal founder, and the first dean. He was born in Charleston, South Carolina in 1808. We have already related the story of his meeting Warren Stone and later moving to New Orleans. He was dean for the session 1834-35 and again for a ten year period 1852-62. In 1862 his health had failed, his fortunes were shattered and the condition of his country weighed heavily on him. He removed to Havana where poor health pursued him. After the war he returned to New Orleans to find the medical building he had promoted occupied by the United States military—one wing for a colored school, under charge of the Freedmen's Bureau. Notwithstanding his failing health he set to work to revive the University and was made president in 1866. But he died at the St. Charles Hotel in 1867 of an incurable (at that time) dysentery.

Charles A. Luzenberg, the second dean, was born in Italy in 1805 and died of the doctors' disease, angina, in 1848. He had planned to go to Virginia for his health but he was stricken on the way and died in Cincinnati. He also was one of the founders, being the first Professor of Surgery. He was dean for only one year, 1835-36. He officiated at the first graduation exercises and delivered his address in Latin. He resigned soon thereafter. Whether the custom requiring the address in Latin had anything to do with his resignation is not recorded, but if the same requirement were made of deans now, there would probably have to be several resignations.

Edward H. Barton, the third dean, was born in Virginia in 1796. He was also one of the founders, being appointed on the faculty in 1834 before the college opened. His introductory lecture given on January 17, 1835, on "Climate and Salubrity of New Orleans" was so much appreciated by those who heard it and heard of it until he was requested and urged to publish it for distribution, which he did. He was a student of the vital statistics of New Orleans, as is evidenced by the scholarly studies

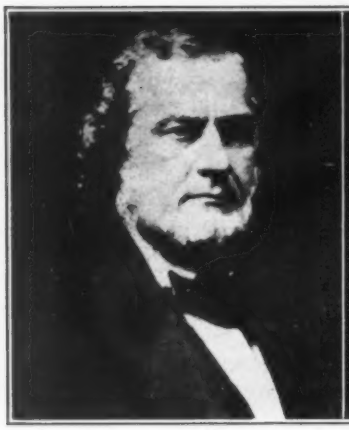

Fig. 10. THOMAS HUNT

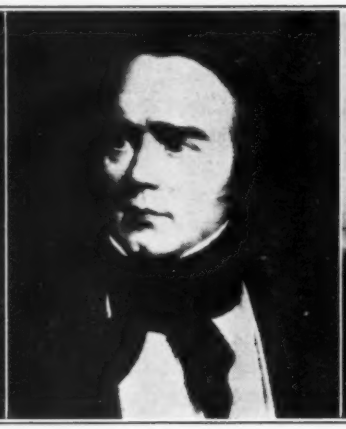

Fig. 11. CHARLES A. LUZENBERG

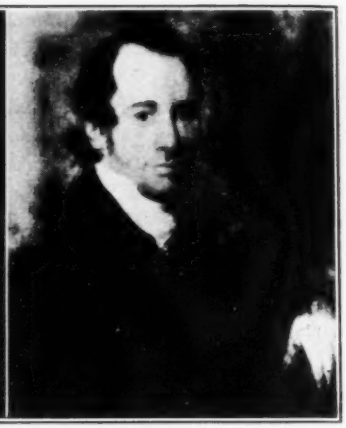

Fig. 12. EDWARD H. BARTON

by him to be found in our library. His publication on "The Cause and Prevention of Yellow Fever at New Orleans and Other Cities of America" was very much in demand throughout the world and went through three editions in three years. However, it exposed the fearfully unsanitary conditions of the city which he associated with yellow fever. It is interesting how positively, in 1854 to 1857, he associated yellow fever with abundance of mosquitoes. This report of the Sanitary Commission of New Orleans, of which Dr. Barton was chairman, made him very unpopular with the profession and with the public, as so often has been the case with others who dared to tell the truth and expose the unhygienic conditions that existed here. Barton was dean for four years, 1836-40.

John Harrison, the fourth dean, was born in Washington, D. C. in 1808. He came to New Orleans in 1831 and within a year survived attacks of both cholera and yellow fever. He was house surgeon of Charity Hospital at the time the Medical College was founded. He was also one of the founders, although it is said that on account of poor health, he did not perform the duties of his position of Adjunct Professor of Anatomy the first year. Harrison was small of stature and frail but a most energetic worker on things he was interested in (not so much the practice of medicine, of which he never did much). He was elected vice-president of the American Medical Association in 1847. He served as dean two different times, 1840-41 and 1842-44, and died of tuberculosis in 1849.

James Jones, the fifth dean, was born in

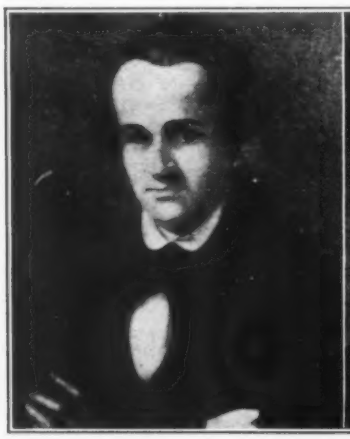

Fig. 13. JOHN H. HARRISON.

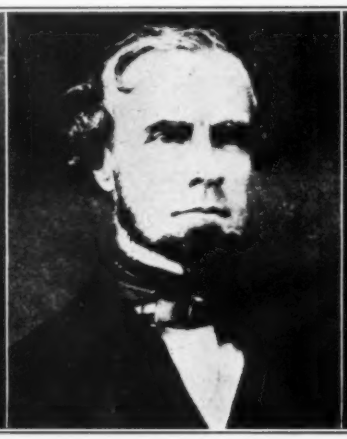

Fig. 14. JAMES JONES.

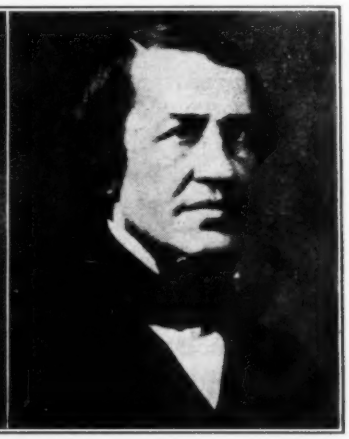

Fig. 15. AUGUSTUS H. CENAS.

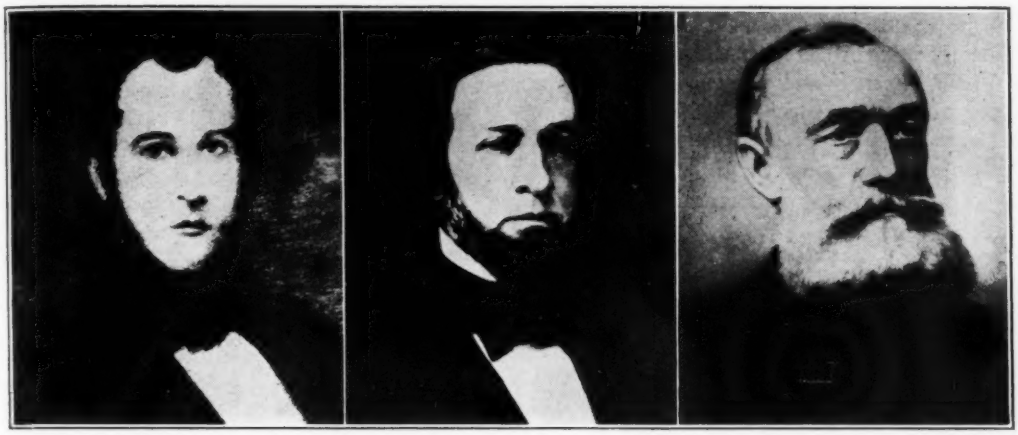

Fig. 16. WILLIAM M. CARPENTER. Fig. 17. GUSTAVUS A. NOTT. Fig. 18. TOBIAS G. RICHARDSON.

Georgetown, D. C., in 1807, graduated from the University of Pennsylvania in 1828 and removed to New Orleans in 1831. He was a member of the faculty from 1836 to 1873 and was one of the founders of the Louisiana State Medical Society; also a prominent member of the American Medical Association for a quarter of a century. He was dean twice, 1841-42 and 1848-9.

Augustus H. Cenas, the sixth dean, was born in New Orleans in 1808. He was one of the founders and was a member of the faculty from 1834 to 1835. He was an intimate of Warren Stone's. On account of being a native of New Orleans it is said that he acted as a kind of liason officer between those who were from elsewhere and the New Orleans profession. No doubt his services were needed during the turbulent early days of the medical college. He was dean for one session only, 1844-45.

William M. Carpenter, the seventh dean, was born near St. Francisville, Louisiana, in 1811. His name is among the first list of graduates in 1836, but the old register of medical licenses of New Orleans to be found in the museum of medical history in our library, shows that he was licensed by examination on February 29, 1836, two months before his graduation. In 1842 he became professor of Materia Medica, which position he held until he died in 1848. He was interested in botany and had an international reputation as a geologist. He was dean for one year, 1845-46.

Alexander J. Wedderburn, the eighth dean, was born near Washington, D. C. We do not have the exact date of his birth nor have we been able to locate a picture of him. He was appointed an Assistant Surgeon in the United States Navy in 1835, Passed Assistant Surgeon in 1842, and resigned his commission in 1844. He evidently came to New Orleans in his official capacity and decided to stay, for he received his license to practise, by examination, on September 30, 1842. He taught anatomy and was interested in vascular surgery. He recorded a case of ligation of the external iliac artery in 1846. He was dean for two years, 1846-48.

Gustavus A. Nott, the ninth dean, was born in Columbia, South Carolina, in 1816. He came to New Orleans about 1837 and was elected Professor of Anatomy in 1838. He later, in 1848, was elected to the chair of Materia Medica, which he filled until the time of his death in 1867. He was dean for three years, 1849-52.

Tobias Gibson Richardson, the tenth dean, was born in Louisville, Kentucky, in 1827. He was a private student of Samuel D. Gross and received his medical degree from the University of Louisville. In 1853 he published a text book of anatomy. He had served two years as Professor of Anatomy at Jefferson Medical College when he came to New Orleans to accept the Chair of Anatomy in this school in 1858. Dr. Richardson was one of the foremost surgeons and men in medicine of his time. He was elected president of the American Medical Association in 1877 and was appointed by Paul

Tulane as a member of the original Board of Administrators of the Tulane Educational Fund. In 1872 he succeeded Warren Stone to the Chair of Surgery, which he held for 17 years. He served as dean for twenty years, 1865-85.

Stanford E. Chaille, the eleventh dean, was

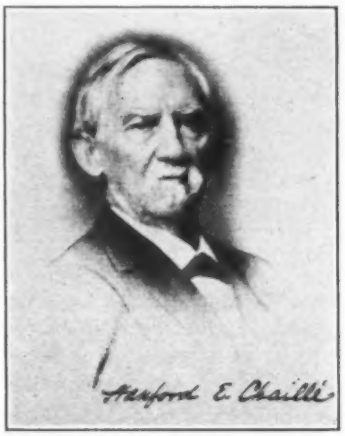

Fig. 19. STANFORD E. CHAILLE.

born in Natchez, Mississippi, in 1830. He received his college education at Harvard University, from which he received both the A. B. and A. M. degrees. He graduated from this school, the Medical Department of the University of Louisiana, in 1853. He also studied in Paris with Claude Bernard in 1850-51. He served in the Confederate Army throughout the war. He was chosen by Congress one of twelve experts to investigate the yellow fever epidemic of 1878 and was appointed by the National Board of Health one of four members of the Havana Yellow Fever Commission of which he was president, in 1879. On March 20, 1858, Dr. Chaille was chosen a Demonstrator of Anatomy in the school. From that time to the date of his retirement in 1908, fifty years, he taught in positions of greater and greater responsibility and from 1885 to 1908 was also dean. He served as dean for the longest period any one has ever served in this school. He was an able and forceful teacher and a most capable executive.

Isadore Dyer, the twelfth dean, was born in Galveston, Texas, in 1865. He received his Ph.B. degree from Yale University and his M.D. degree from Tulane. He served as interne in New York Skin and Cancer Hospital

Fig. 20. ISADORE DYER.

and specialized in dermatology. During the World War he held responsible posts and had the rank of colonel in the Army. He was internationally known as an authority on leprosy, the literature on which was greatly enriched by his writings. He was a man of tact and judgment, of courtly manners, firm though gentle, kind, and quickly gained influence and leadership among the members of any group, large or small, of which he formed a part. He was a brilliant scholar and a fluent writer. He was associate dean one year, 1907-08, and dean from 1908 to his death, also from the doctors' disease, angina, on October 12, 1920. He was the only dean to die while still in office. All the rest of them thus far have survived their deanships.

The present incumbent was born in Mississippi, is a graduate of Tulane, is the thirteenth dean, and is now serving his thirteenth year in that position.

THE INFLUENCE OF THE LAST 100 YEARS OF MEDICAL EDUCATION ON THE CULTURE, GROWTH AND PROSPERITY OF NEW ORLEANS

RUDOLPH MATAS, M. D.
NEW ORLEANS

In commemorating the Centennial of Medical Education in Louisiana, conjointly with the foundation of the Medical College of Louisi-

ana, later the Medical Department of the University of Louisiana, now Tulane, the Orleans Parish Medical Society as the representative of the medical profession of New Orleans has taken due cognizance of the unity and fusion of these two anniversaries, for it is a fact that medical education, in so far as it concerns Louisiana after it became a sovereign state in the American Federation, (distinct from Louisiana as a foreign colonial possession)—had its beginning and development in the initiative, enterprise and vision of the pioneers in medical education who founded the Medical College of Louisiana, in New Orleans, in 1834.

This College was not only the first institution chartered by the State for the purpose of medical education, but it was the prime mover and parental source of the University of Louisiana, the first institution created by the State for the higher education of the youth of Louisiana in the professions and in the arts and sciences. The constitution of 1845 which had provided for the establishment of the University was not executed until 1847, when, with the erection of suitable buildings by the State, the Medical College of Louisiana became the Medical Department of the University of Louisiana. It continued to function and develop under this title until 1884 when the prefix, Tulane, was added to the State title in honor of the great philanthropist who had donated over one million dollars for the higher education of the white youth of New Orleans.

It was at this time that the Trusteeship of the University was transferred by an act of the Legislature to the Administrators of the Tulane Educational Fund—a non-sectarian and non-political body of which the Governor of the State, the Mayor of New Orleans and the State Superintendent of Education are ex-officio members, and it was in this way that the State University became the Tulane University of Louisiana and has continued under the government of this corporation ever since.

It is not pertinent to the task assigned me on this occasion to go further, at this moment, into the history of the Medical School of the Tulane University of Louisiana except to bow in respectful homage to the memory of the illustrious founders who constituted its first Faculty—Thomas Hunt, John Harrison, Charles A. Luzenberg, Monroe Mackie, Thomas R. Ingalls, Augustus Cenas, E. Bathurst Smith, E. H. Barton and Warren Stone.

To these and to the great philanthropic givers, Paul Tulane, Ida Richardson, A. C. Hutchinson, A. B. Miles, George Vincent, the Delgados and to the great educational foundations, the Rockefeller, the Carnegie, and to still many other educational agencies, patriotic citizens and friends of medical education, it is due that the modest structure erected by the pioneer founders of 1834, has risen to the lofty heights of unsurpassed educational efficiency that we now contemplate in the Medical School of the Tulane University of Louisiana.

THE INFLUENCE OF FRENCH MEDICAL EDUCATION ON THE CULTURAL LIFE OF NEW ORLEANS

I cannot attempt even a synoptical discussion of the influence of medical education during the last hundred years, on the culture, growth and prosperity of New Orleans, which is the subject that has been assigned to me on this occasion, without feeling that I would be guilty of gross injustice to the subject and to past generations were I to disregard the primary, fundamental and all-important role of the French practitioners who furnished the background of medical history during the century and over that Louisiana was a dependency alternately of the Crowns of France and Spain. Moreover, we cannot overlook the fact that the educational influence of the medical schools of France, and especially Paris, continued in full vigor and even predominated in New Orleans and Southern Louisiana for nearly half a century after this state had become an integral part of the American Federation.

It is scarcely necessary in speaking to an audience largely composed of native Louisianians, among whom figure with distinction so many of French and Latin-American descent, to stress the historic fact that it is to France that Louisiana owes all that is basic in the primordial structure of her social organization. For over a century language, government, education, industry, commerce, agriculture, architecture, religion, law, medicine and all the esthetic arts and the literature were essentially French,—and Louisiana, typified by New Orleans, was only a re-

flex or mirror of the visage and soul of France.

In considering the influence of medical education on the culture and intellectual development of Louisiana, we must draw a sharp line of demarcation between the first 100 years of the French and Spanish colonial regimes and the *post colonial* period which began with the transfer of Louisiana to the United States in 1803. During this second period the seed of French civilization implanted by the first colonists fructified, flourished and attained its highest development in their native descendants, the Creoles of French and Spanish origin, who preserved and cultivated the language and traditions of their ancestors.

Of the colonial period, little can be said that relates to the influence of medicine in the cultural development of the colony apart from the medical relief that the first practitioners who came from France gave to the early settlers who were sorely tried by the injuries sustained in their constant warfare with hostile Indians and European intruders, and still more by the afflictions of the deadly fevers and other plagues which assailed them in their new, wild and insalubrious surroundings.

The first names that appear in the medical history of the French colonial period are those of the surgeons and physicians who were sent by the home government to New Orleans and other colonies established by Bienville on the gulf coast, in the first decades of his administration. The majority of these medical officials had the rank of "surgeon-major" in the French army and were designated as "sieurs," meaning gentlemen. Several of these, such as the Sieurs Alexandre, Brosset, Larmousian, le Prat, Puyardon, Manadé, and Latour figured in the first directories and official documents of the colony from 1731 and subsequently as surgeons and physicians to the King's hospital which Bienville had constructed on the Rue du Quay (Levee Street) for the benefit of the officials, soldiers and sailors employed by the colony. These medical men brought with them the educational qualifications and culture that were necessary for their medical degree. They undoubtedly contributed to the social and intellectual life of the colony which in New Orleans, in 1732, consisted of 683 inhabitants; 425 whites and 258 negroes, with some sprinkling of Indians. We know very little of these early practitioners, except that some of them were accomplished as botanists and in other ways which added their social value to the community.

In so far as culture, manifested in literature and the fine arts,—music, poetry, the drama, the first hundred years of the colonial period are barren of results.

THE CONTRAST BETWEEN THE CULTURE OF THE FRENCH COLONIAL AND POST-COLONIAL PERIOD

In contrast with the 18th century, which had been rich in history, but slow in progress and prosperity, the 19th century was ushered in by an epochal event which marked the beginning of a new era. The American era completely revolutionized the governmental, commercial and intellectual life of the young metropolis.

The transfer of Louisiana to the United States in 1803 was the signal for the abolition of all restrictions that the colonial governments had imposed on the navigation and commerce of the Mississippi; it opened the doors wide to immigration from the surrounding Anglo-American territories and states of the Mississippi Valley; it opened new and profitable markets for the richest products of Louisiana, sugar and cotton, and transformed the old river front into one of the greatest harbors of the world.

In consequence, the population increased by leaps and bounds, the value of the land and of the crops rose enormously; the cultivation of the plantations was stimulated to the highest pitch of production, and a new epoch of ease and plenty began, which soon transformed the old country homes of the colonial planters into baronial estates which gave the civilization of the period a quasi-feudal cast in which thousands of slaves labored as serfs and retainers to add wealth and power to their lords and masters. With greater wealth, came greater opportunity for education and travel to which were added the amenities and luxuries of a highly sensitized and cultured civilization. The innate love of art and literature in all its forms which had remained latent and largely suppressed during the relative penury and stagnation of the colonial period, now expanded in full bloom. The golden age of the Latin civilization in Louisiana had come and found its

most typical exponents in the old Creole families who constituted, by right of inheritance, possession and culture, the aristocrasy of the land.

THE GOLDEN AGE OF FRENCH LITERATURE AND ESTHETIC CULTURE

It was during this time that the French literature of Louisiana flourished at its best. This period, beginning about 1825, continued until the Civil War (1860-64), when it ended in the universal ruin and desolation that submerged Louisiana and the South in its catastrophic consequences. It was during this golden age that New Orleans was the Paris of America, when the salons of the *grandes dames* of the Vieux Carré vied with those of the Faubourg St. Germain in the brilliancy of their wit, the beauty and elegance of the women and the glamour and celebrity of the distinguished men who frequented them. It was during this age of Athenian culture, that sprang from the same stock the historians Martin, Gayarré, Debouchel, Dufour, and at a later period, Alcée Fortier; the dramatists Villeneuve, Lussan, Canonge, Mercier and Delery; the poets, St. Ceran, David, Latil, Dessommes, and the Rouquette brothers; and novelists such as Testut, Grima, Mercier; and still others in different fields, such as Beauregard, the soldier; Audubon, the artist-naturalist; Gottschalk, the master pianist; Paul Morphy, the champion chess player of the world, and others, too numerous to even classify, whose works constitute the most unique chapter in the history of American literature, and will remain a never-ending testimonial of the literary fertility and esthetic genius of the great race that produced them.

THE CONTRIBUTION OF FRENCH PHYSICIANS TO THE MEDICAL PROGRESS OF LOUISIANA

In so far as medicine is concerned, it may be safely said that from the establishment of the Colony of Iberville and Bienville in 1699, to the year 1834, when the Medical College of Louisiana was founded (now Tulane), the education and methods of medical practice were almost exclusively French. Even during the thirty-five years of the Spanish interregnum (1769-1803) the French school remained dominant and uninfluenced except in official documents in which the Spanish language was obligatory. It was then chiefly the French colonial practitioners of the last quarter of the 18th century and their Creole descendants who organized the first boards of health, the first medical societies and the first medical journals, and who made effective the first laws to regulate the practice of medicine and who drafted the first municipal regulations for the sanitation of the city. They also published in French the first contributions to the literature and the progress of medicine in this State.

THE CONTRIBUTIONS OF FRENCH PHYSICIANS TO MEDICAL PROGRESS AND TO THE LITERATURE OF LOUISIANA

It was during the prosperous post-colonial period that the Creole youth, "la jeunesse dorée," and in fact all those whose education and resources justified a medical career, looked to Paris as the fountain source of their inspiration and knowledge. Though native born, they were educated in the lycées where they cultivated and acquired the French language with a purity, perfection and elegance that would have made them fit for the orator's tribune or for the lecturer's platform, among the best of the Parisian conferenciers at the Sorbonne.

It is not surprising, therefore, that the French literature of Louisiana should find some of its most brilliant exponents in the medical profession. Suffice it to recall the great name of Alfred Mercier, novelist, essayist, poet, and the most learned of the classical scholars that Louisiana has produced. His literary reputation had been long established in the golden age of French letters of the antebellum period, and it was under his distinguished leadership that the Athenée Louisianais was founded, with the aid of the ablest French scholars who had survived the calamities of the Civil War. The purpose of the society was to revive an interest in the French language and literature which had fallen into decline after the fortunes of the leading French families had been wrecked by the war. His brother, Armand, who was one of the most distinguished surgeons of his day, was its first president in 1876. It is notable that the two brothers, especially Alfred, despite their large clientele, found time to devote to the culture of literature. The foundation of the Athenée brought to light many medical intellectuals who flourished before the War in the city and in the country parishes of Louisiana. Notable among medical members were Delery, Testut, Fortin, Turpin, Faget, Dell Orto, Huard, Dupaquier, *pere et fils*, Sabin Martin, Devron, Castellanos, J. M. and P. Durel, Havá, Layton, Formento, Souchon, Bayon, Borde, Touatre, and, in the French speaking parishes, Blanchet, Duperier, Sabatier, Giraud, Rouanet, Pavy, and that ac-

complished Canadian of French descent, McGuire, of Jeanerette,—and still so many others who, apart from their purely professional attainments shed honor and lustre on French culture in Louisiana, in language, science and letters.

PREVOST

Incidentally, it is pleasing to refer on this occasion to Francois Marie Prevost, the greatest hero in the medical history of Louisiana. He was a French colonial surgeon, born at Pont de Çe, near Angeres, France, in 1764; died in Donaldsonville in 1848, who having emigrated from San Domingo at the time of the negro rebellion, settled in Donaldsonville, Parish of Ascension, in the beginning of the last century, about 1800 or 1801, at that time a mere hamlet in a plantation settlement. It was there that this intrepid and skillful surgeon was the first to perform the Cesarean operation in Louisiana and for the second time in North America. He performed the operation on negro slaves suffering from pelvic rachitic deformities, thereby saving many otherwise doomed mothers and unborn babies by an operation, which, at that time, had been condemned as too hazardous by the greatst authorities in the surgical world. His courage, enterprise and skill were rewarded by the most unprecedented success, but yet so modestly regarded by him that the surgical world remained ignorant of his achievements for over half a century; and, when we consider that Prevost operated in the most primitive surroundings, in negro cabins, under oil or candle light, without anesthetics, antiseptics, adequate instruments or trained assistants, his operations must be regarded as extraordinary achievements which place him in the front rank of the world's great pioneers in abdominal surgery. He will remain a heroic figure in our history and a great honor to the French traditions of Louisiana.

FAGET

Nor can I omit, even in this hurried reference to the accomplishments of the physicians of Louisiana who have won a right to be regarded as the benefactors of its people, the name of Jean Charles Faget (1818-1884). Faget had graduated with great distinction in Rouen, in the home of his ancestors, and when he established himself in New Orleans, he was at once recognized as a profound scholar and savant by his confreres in the profession. It was he who introduced the thermometer in medical practice in Louisiana and by his thermometric studies definitely established facts of great diagnostic and prognostic importance in yellow fever which constitute what is known as Faget's laws. He was among the first to relieve parturient women of the pangs of labor by the anesthetic use of chloroform. By this alone, his name is worthy of enduring and grateful memory by the suffering motherhood of Louisiana.

I could go on almost indefinitely with an account of the role played by the French physicians of Louisiana and of their French speaking descendants, in the civilization, culture and intellectual development as well as in the history of medicine of this State. But I have said enough even in this passing survey to show that in this respect Louisiana stands conspicuously alone in the Sisterhood of the American States as an example of the fundamental cast of her Latin civilization and in the fact that from the very beginning of its colonial existence the people of Louisiana benefitted by the presence of a highly cultured class of medical practitioners who, trained and educated in the best French schools, brought with them not only all the resources of the Healing Art, but also that European culture and refinement that was denied the vast majority of the English speaking practitioners who developed in the early age of the American Federation.

LOUISIANA A DUAL PERSONALITY: ROLE OF THE LATIN-AMERICAN AND THE ANGLO-AMERICAN IN THE MEDICAL HISTORY OF LOUISIANA

It was during the post-colonial period which began with the Louisiana purchase by the United States in 1803, that the American of Anglo-Saxon derivation first appeared and shared with the Latin, and especially the French-American elements of the population, in the material and cultural development of the newly acquired State. This racial distinction between the old French-American and the new Anglo-American population gave Louisiana the aspect of a dual personality, which, though contained in the same encasement, was divided, and functioned in two separate compartments. In the course of time, the Anglo-American grew larger by constant accretion of his constituent elements and gradually crowded the Latin into a smaller recess of his compartment. The dual personality, however, persisted until the war came in 1860-64 to fuse the two halves together in defense of a common cause and the same interests. They both suffered the same fate and both were reduced to ashes. But out of the incandescent crucible of war arose, phenix-like, the Louisiana of today—"a single-minded personality acting as one, but a com-

posite of two, in which the traits and characteristics of each harmoniously blend. "That is why the Louisianian is distinguished as a distinctive type among the citizens of the United States. That is why Louisiana is unique among tht American cimmonwealths."*

This simile, which is true of the fusion of the two races which have, in succession, ruled over the destinies of Louisiana, applies equally as well to the medical profession as represented by the two races that have exercised its mission in this State. For nearly a century they lived together, but travelled on widely divergent lines.

A moment's reflection on the status of medical education in the United States at the time of the Louisiana purchase in 1803, and of the conditions that prevailed here until about the eighth decade of the last century, will suffice to explain the great differences, culturally, racially and otherwise, that separated the medical men of European education, and particularly of French derivation, from the American practitioners who came to Louisiana in the post-colonial period.

THE EARLY BEGINNING AND DEVELOPMENT OF MEDICAL EDUCATION IN THE UNITED STATES OUTSIDE OF LOUISIANA

The conditions of medical education that prevailed in the early British colonies of New England and of the East bordering on the Atlantic seaboard were extremely elementary, as would be expected in the settlements and communities that had only recently risen out of the wilderness. Ship surgeons and a few physicians who came from England with the colonists at first sufficed for their needs. But, as the population increased, the supply from abroad was not adequate and medical service from native-born sources became necessary. The physicians, so-called, who practiced at that time had no better medical education than that gained as pupils in a doctor's office, and primitive medical schools originated as substitutes for this very inadequate apprentice system. At the time of the purchase of Louisiana by the United States in 1803, five medical schools had been established in the older states of the North and East; the first in Philadelphia (1765), then in New York (1768), Harvard (1783), Dartmouth (1798), Kentucky (Transylvania at Lexington 1799), Yale (1810). All these began as private corporations which later contracted university affiliations. The instruction was based on the British system of apprenticeship which exacted only a preliminary grammar school education and the practical knowledge and experience that the candidate had gathered from his preceptor as a medical clerk or assistant in his office. The medical school then merely supplemented the preceptor's teaching by a series of lectures and demonstrations which were at first given in a session of one year and later of two years before the candidate could apply for his degree and license to practice.

THE EFFECT OF IMMIGRATION AND THE SETTLEMENT OF THE GREAT WEST IN THE EDUCATIONAL DEVELOPMENT OF THE EARLY PIONEER TYPE OF AMERICAN PRACTITIONER IN THE 19th CENTURY.

If these early developments had been allowed to continue without interruption, conditions similar to those in Europe would have no doubt prevailed with the greater development of general education. But the interruption did occur when an epic event of unheard of magnitude began to unfold itself with the conquest and settlement of the vast wilderness west of the Alleghanies in the late 18th and the beginning of the 19th century. Beginning at the Alleghanies, the migratory waves of the pioneers continued to pour in, first into the midwest until it reached the territory bordering on the Mississippi from the Great Lakes to Louisiana. By 1800, the population of the territory west of the Alleghanies, where only a short time ago Indians roamed in their hunting grounds, was estimated at a million inhabitants. Ten years later their number had risen to two and a half millions, and in 1830, to three and a half millions. Slowly, but steadily, the frontier was pushed westward and continued to advance until, in 1840, it had crossed the Rockies and reached the Pacific.

These Western pioneers were native born Americans who fought in the War of Independence. They must not be confused with the European immigrants who followed in considerable number in their wake before 1825 and

*For a comparison of Louisiana to a dual personality, see the original suggestion and elaboration of this idea in Chambers History of Louisiana, vol. 1, p. 514, 1925.

who sufficed only to fill the gaps which they had left behind them in the East and remained negligible until 1825. It was these intrepid pioneers, coming from Kentucky, Tennessee, Ohio and Missouri, who first settled the Northwestern parishes of Louisiana which had been scarcely touched by Latin civilization. It is they who gave the distinctive Anglo-Saxon cast which differentiates the northern from the southern half of our State.

The tremendous tidal wave of European immigration above referred to, did not come to flood the country with its countless and heterogeneous human millions until after 1825. "Between 1828 and 1830, 150,000 people of all types and conditions had arrived at the Atlantic ports seeking better homes and fortunes in the new El Dorado of the West. Between 1831-40, 600,000 had arrived and between 1845 and 1850, 1,700,000, and in the following decade, 1850-60, 2,600,000!"

ON THE EFFECT OF THE TIDAL WAVE OF FOREIGN IMMIGRATION IN INCREASING DEMAND FOR NEW MEDICAL SCHOOLS

"These millions of immigrants, chiefly recruited from the peasantry and working classes (proletariat) of Europe, who had come so suddenly to swell the population of the Western World, found the country scarcely prepared to care for them. They were not provided with doctors (a few came with them from abroad) and those who did not settle in the cities needed medical help as they scattered and located in distant and undeveloped sections of the country, especially in the Southern and Western states. The cry then arose for more doctors, many more than the few Eastern colleges could supply. The demand for medical help grew more imperative as the crowded caravans of covered wagons rolled into the new and unsettled region of the Southwest that the Louisiana purchase had opened for them.

What was needed was first aid,—medical help, no matter how elementary it might be. Education and culture were of secondary importance. What was wanted in the emergency was efficiency and practical utility.

THE RESULTS

This cry for more doctors started a movement for the creation of medical schools which was as irresistible as an avalanche. In consequence "medical schools shot up like mushrooms after a night of rain." Whenever a few doctors were gathered together in a town they would found a school, get a charter, call themselves professors, give medical instruction in some rented building, deal out diplomas and divide the tuition fees. It was a good business, because former students would enlarge the professors' practice by calling them for consultation. The maintenance of these colleges, including the salaries of the self-appointed professors, was wholly dependent on the number of students and the amount of their fees. Hence the colleges were forced, in order to survive, to adopt such measures as would tend to increase the number of students.

"Between 1810 and 1840, twenty-six new medical schools were founded; from 1874-1876, forty-seven. With the wave of immigration, arose a corresponding number of schools; no less than 114 were founded between 1873 and 1890. In some states and individual localities schools were literally heaped one on top of the other. In Indiana there were 27, in Illinois 39, of which 14 were in Chicago alone. Missouri broke all records with 42; Louisville had 11 schools, as compared with Cincinnati's 20. It is difficult to give exact figures, as many of these schools collapsed soon after their establishment, some of them never existing except on paper. It has been calculated that in the course of a century the United States produced 400 medical schools!"

THE SITUATION IN NEW ORLEANS WHEN THE FIRST MEDICAL COLLEGE OF LOUISIANA WAS FOUNDED IN 1834

And that was the situation when the Medical College of Louisiana was founded by the seven intrepid members of its first faculty in 1834. It is the oldest in the Southwest, the third in age south of the Potomac and Ohio Rivers and the fifteenth in the United States. I say *"intrepid"* in characterizing the action of the first faculty, who were all young men, because it took courage, enterprise and conviction to embark in such an undertaking in the State of Louisiaa. It took courage because it was a challenge to all the medical and social traditions of the State. For Louisiana, one of the oldest colonial possessions established by a European power in America, had the unique privilege since its very foundation, of enjoying the benefits of medical service from practitioners who

***For the above quoted statistical data and discussion on the origins of American medical colleges the author is largely indebted to Professor H. E. Siegerist's masterly volume on "American Medicine" chapter 5, pp. 131 et seq. Norton & Co., N. Y. 1934.**

had been educated and trained chiefly in Paris, the oldest and most renowned center of medical instruction in the world. (Very few came from Spain or the Spanish-American possessions.)

As previously indicated, the French system of medical education was the one exclusively practiced in New Orleans, not only during the colonial period, but for over half a century after Louisiana had become an integral part of the American Union.

Though all governmental or political relations had ceased with the mother country, the sons of the French Creoles, the colonial descendants who chose medicine as a career, were sent to France and after completing their studies, returned again to Louisiana to practice in a French population which at the time the Medical College of Louisiana was founded, in 1834, had reached the apogee of its greatest social and intellectual development.

To attain the M. D. degree in Paris, or in any French university, required the preliminary academic degree of Bachelor of Letters, which was issued by the lycées or high schools of France and covered four years. The medical course then included a graded course of five years in the hospitals and laboratories. Apart from the early education in the parochial French schools of New Orleans, a Louisianian who aspired to the prestige of the M. D. Paris degree had to give at least nine years of his life in order to accomplish his purpose.

THE CONFLICT BETWEEN THE PRACTITIONERS OF EUROPEAN TRAINING AND NEW AMERICAN SCHOOL

The contrast between this system and the American innovation of a medical education which practically required only the most elementary school foundation and only one short and repeated course of theoretical lectures, can well be imagined, and, as you have been so well told by Dr. Fossier, furnished material for violent opposition, criticism and acrimonious discussions.

THE JUSTIFICATION FOR THE MEDICAL COLLEGE OF THE NEW AMERICAN TYPE IN LOUISIANA

None the less the educational conditions that existed in the old world and the new were radically different. The founders of the college realized that the American nation was undergoing a tremendous and almost volcanic evolution, —the enormous increase in population by the constant inpour of foreign immigration which was trying to adjust itself to new conditions, the settlement of unpeopled areas which were barely rising out of the wilderness; the impossibility of adjusting the requirements of a higher education to the pressing and imperative needs of a new and largely unlettered multitude who, in the Southern and Western sections were just beginning to establish and develop organized communities and who were infinitely more concerned in the struggle for the prime necessities of life, for comfort, and for wealth rather than for the refinement of education. This situation made practical utility rise above all other considerations. "Culture, higher education and the things of the spirit could only come out of the small end of the horn." Besides, the French-speaking population of New Orleans and Louisiana had become practically stagnant through lack of racial reinforcements from France and the Creole population was being steadily encroached upon by a constantly rising tide of English-speaking or foreign immigration. Consequently the number of doctors educated in France or foreign countries could not suffice to meet the requirements of the population and the creation of a medical school at home appeared to be an imperative necessity. Again, any attempt to adopt or imitate the European standards of medical education in the existing chaotic and rudimentary state of general education that prevailed in Louisiana and the South was not only an impossibility but a folly. What the country needed first, was medical help, first aid in the great emergencies of injury and disease.

And this, the young Faculty, was prepared to give in a raw and unseasoned way, it is true, but they were superior men, of innate ability, far above the standards of the medical education that was available in the best American schools of their time. It was the strength of their rugged personalities and the ability they displayed in developing the teaching resources of the Charity Hospital, that gave dignity and stability to their budding enterprise and that ultimately overcame the criticism and opposition they first encountered.

The testimony of a hundred years of medical education has now come to vindicate the vision and the judgment of the founders of the Medical College of Louisiana. During these years medical education has been radically transformed and

shorn of all the excrescenses that at one time disfigured it.

The movement in the profession which has brought about this self-instituted reform furnishes the most unique and brilliant chapter in the history of American medicine. It is the product of over forty years of continuous effort at cultural elevation and self purification in which the forces of medical organization supported by a rapid rise in the cultural sentiment of the Nation and the wealth of its philanthropic educational foundations, have combined to lift medical education to the highest level of efficiency. The evolution of the Medical School of Tulane is typical of the transition from an obsolete past to the present live and ambitious activities in scientific and cultural achievement that characterize the educational idealism of the medical institutions of America today.

The time is long past when American medical students flocked to Europe to perfect their education. Europe is now coming to America to profit by the incomparable opportunities for medical learning in the magnificent institutions which the wealth and wisdom of the Nation have provided for the benefit of Medical Science and humanity.

THE INFLUENCE OF MEDICAL EDUCATION ON THE CULTURAL, LITERARY, SOCIAL AND PROFESSIONAL LIFE OF NEW ORLEANS

And now to the question: "What have one hundred years of medical education done for the culture, growth and prosperity of New Orleans?"

Let me state at the outset and without fear of exaggeration that there is no other city in the United States that owes more to medical education as the exponent of medical science than our own beloved city of New Orleans. There is no other city on the American continent which has been so long and closely identified and concerned with medical problems and in medical progress as New Orleans. From the very beginning of its foundation 215 years ago, the periodic visitation of disease, whether endemic or exotic, which threatened the very existence of New Orleans, preoccupied the minds of her founders from remote antiquity and made the doctor of medicine the most necessary if not the most conspicuous figure in her citizenry.

In regard to culture, if we mean by this the extra professional accomplishments that contribute the cultural, esthetic and intellectual life of the community, I have said enough, I trust, to prove that during the French post-colonial period the physician played an enormous role in the literary and intellectual life of the community. Suffice it to again recall the one name, Alfred Mercier, to show that Apollo and the Muses are akin to Esculapius. A glance of the bibliographic indices that catalogue the publications of the French writers of Louisiana, will show that some of the most enduring contributions to the literature of Louisiana have come from medical men. In regard to the American period, if I may so distinguish it from the French, I would also quote the name of James Dickson Bruns to rouse at once a feeling of admiration for his beautiful poetic and literary accomplishments. He was recognized in his day not only as the most perfect critic of English verse, but was himself a poet who had risen far above the level of the mere dilettantism that so many of us medical men are prone to indulge in. Among the poets, I would also include Dr. Holcombe, a cultured homeopath of the 1870s, and Dr. Isadore Dyer, our late Dean, who has left several lyrical mementoes of his invocations to the Muses. For downright eloquence, I know nothing that can surpass the stirring and thrilling address that Dr. Chaille delivered to the medical veterans of the confederate war, on May 19, 1903. The addresses delivered by Drs. Beard, Brickell and Bruns at the foot of Clay statue in Canal street, to the White League on the eve of the battle of September 14, 1874, that relieved the people of Louisiana from the atrocious incubus of carpet bag rule, are admirable illustrations of the powerful oratory that medical men can wield when roused by tyrannical oppression, in defense of the people.

In regard to the culture that is related to the scholarly learning of our profession; the names of the men who have brought fame to New Orleans by their contributions to medical literature are legion. Among those who stand preeminently in this line are Faget, Delery, Testut in the French period; S. A. Cartwright, Bennet Dowler, E. B. Barton, John Harrison, E. D. Fenner, John L. Riddell, Joseph Jones and Stanford E. Chaille, to speak only of the dead. The monographs and scientific essays contributed by these during the century of medical education that we are now celebrating will remain as monuments to their erudition and aca-

demic training in the medical literature of Louisiana.

ON THE GROWTH AND PROSPERITY OF NEW ORLEANS

Now then, as to the influence of medical education on the growth and prosperity of New Orleans, I would say in an aphoristic way that whoever or whatever contributes to the progress of medical science contributes to the welfare and progress of humanity.

From this viewpoint, the growth and prosperity of New Orleans owes more to medical science, as expressed in medical education, than any other single agency concerned in its welfare. To attempt to narrate even in the most synoptic form the progress that has been accomplished by medical education in New Orleans in the course of the last hundred years would be as impossible as it would be superfluous. We all know, at least as medical men, that the century of medical education which we are celebrating today is the greatest, most revolutionizing and most significant in its accomplishments for the good of Humanity than any other century in the history of civilization. But I need not go as far back as a hundred years to contrast the present with the past; even the fifty years that I have lived in the profession are amply sufficient to measure the enormous distance that we have travelled since I was graduated from our Alma Mater in 1880. Even though we were to restrict the comparison to the last thirty years of the present century, they would be quite sufficient to make us realize the immensity of these three decades, when measured in units of discovery and achievement.

Modern medicine, profiting by the world energies that have been set in motion by the revelations of the physical, chemical and biological sciences, has travelled with a vertiginous speed which when contrasted with the pace of the 19th century (fast as that was in its last half) can only be conceived by comparing the speed of the old doctor's horse and buggy with that of the automobile and the airplane. In this flight over the years, we, especially those who have lived in this Southern section, have witnessed a succession of changes in medical thought and practice which to the practitioners of 1900 would seem no less than a mirage such as that which startles the fevered brain of the lost wanderer in a tractless desert when he sees sparkling streams and shady trees by which to quaff and rest. These bewildering visions are not a mirage, but a reality which reflects the radical transformations in medical thought and practice that have followed in the wake of scientific discoveries and new acquisitions.

These have so completely altered the status of medical education, of medical practice, of medical organization and medical licensure, that if one of my classmates of 1880 had fallen asleep at that time and not awakened until now he would feel as bewildered and out of touch with the world about him as another Rip Van Winkle on awakening after a slumber of fifty years.

THE SANITARY AND CIVIC REGENERATION OF NEW ORLEANS

But I am reminded of the Hippocratic aphorism that "art is long and time is fleeting" and that I must relinquish all hope of even counting the strides that we have taken in the forward march of these last five decades of our medical Centenary. I can only beg your indulgence to consider one exception which I deem directly pertinent to the question, "What had medical education done for the growth and prosperity of New Orleans?" Of all the wonders that I have seen since I have lived here, none has impressed me more as having a direct bearing on the progress than the civic regeneration that sanitary science has wrought in our city. I refer to the discovery of the causes, prevention and control of the great epidemic and endemic diseases—yellow fever, malaria, typhoid, typhus, cholera, bubonic pest, diphtheria, scarlatina, whooping bonic, hookworm, amebiasis and still other plagues which for centuries have been the scourge of humanity and deadliest enemies of our progress. Look at what experimental medicine, guiding the hand of sanitation, has done for the health of New Orleans and, in consequence, the prosperity of Louisiana and for that matter, of the whole South. Take one instance,—yellow fever.

Only those of us who have survived the horrors of the great epidemic of 1878, with its five thousand dead in New Orleans alone, can realize the terror and apprehension in which we lived in fear of other visitations,

not only the fear of the disease, but restrictions and trammels put on commerce by the rigid quarantines, often of the shotgun variety, that forbade all communication by land or water with the metropolis and other suspected places.

We of New Orleans and all the people of the gulf states—Mississippi, Alabama, Arkansas, Texas and Florida, felt and suffered the paralyzing effect of this exclusion of our port, "the gateway of the Mississippi," and of the seaboard from commercial, economic and social relations with the outside world. But when the dreaded spectre of the "yellow demon of the tropic" came back in 1905 as an actual reality, a new evangel had come to exorcise it and banish it from our shores.

THE BATTLE OF 1905 AND THE VICTORY OF MEDICAL SCIENCE OVER YELLOW FEVER SUFFICIENT ANSWER TO THE QUESTION, "WHAT HAS MEDICAL SCIENCE DONE FOR THE GROWTH AND PROSPERITY OF NEW ORLEANS."

The story of the conquest of yellow fever and of the victory won in the desperate battle fought from house to house in that—for all time—memorable summer of 1905, when the people of the city won the day with the battle cry "away with the mosquito," "down with the stegomyia" as a slogan, is an old story now worn threadbare by repetition.

None the less the glorious victory of New Orleans over yellow fever in 1905 will remain a heroic episode in which the names of the leaders of sanitary science who made it possible will remain enrolled in the scroll of history, high on the list of New Orleans' greatest benefactors.

All honor to Walter Reed, Lazear, Carroll, Agramonte, Finlay, Carter, Gorgas in Cuba; all honor to J. H. White, commander of the United States Public Health forces, to Quitman Kohnke, the President of the City Board of Health and the first and incessant preacher of the anti-mosquito campaign, to the Orleans Parish Medical Society and the City and State Boards of Health who led our devoted and gallant citizenry to victory in that great fight.

The victory of 1905 forced upon the community the consciousness of the utter inefficiency of the primitive and obsolete system of sanitation, (rather unsanitation), of sewerage, drainage and water supply which prevailed and had long ceased to be fit even for an antiquated colonial regime. It made necessary the destruction of a hundred thousand wooden cisterns, which were the breeding places of the stegomyia mosquito, the paving of miles of mud streets and the suppression of open gutters and other perpetual breeding places of insects and other sources of disease. It was therefore the battle and great sanitary victory of 1905, that put a spur to the civic regeneration of the city and made it the modern salubrious and inviting metropolis that it is today.

NO AMERICAN COMMUNITY MORE INDEBTED TO MEDICAL SCIENCE THAN NEW ORLEANS

So to come back to where we started: will it not suffice to quote the great sanitary victory of 1905 over yellow fever as sufficient answer to the question "What has medical education done for the growth and progress of the city of New Orleans?"

When we consider what the delivery of New Orleans from the thraldom of yellow fever has meant to our city, and to the whole South, is it not proper that the school children should be taught in their text books the names of the great men who contributed to such a stupendous achievement? Should they not learn that the peaceful and bloodless victories of Science that mark the triumph of man in the eternal conflict with his invisible but deadly foes,—the predatory parasites of the microscopic world,—are fraught with infinitely more significance to the welfare of the race than all the bloody battles that bear testimony to "man's inhumanity to man?"

* * * *

And now a last word which I dedicate to my Alma Mater:

*For a more comprehensive historical discussion of the "Campaign Against Yellow Fever and the Victory of Sanitary Science in New Orleans, in 1905" see the Author's paper in the Louisiana Historical quarterly, July, 1925; and his address: "The Louisiana State Medical Society and Medical Progress (1895-1926)," N. O. Med'l. & Surg'l. Jnl. pp. 5-15, v. 79, July, 1926.

In the course of the hundred years of its existence, the Tulane University of Louisiana has stood as the keystone and the bulwark of medical education in Louisiana. During these years she has carried aloft the torch of medical knowledge and transmitted its flame to her sons and daughters from one generation to the other. During these years she has shared with her people the variations and viscissitudes of fortune; she has suffered with them in the ravages of war and its disastrous consequences; during these years she has stood by them in the gloom of pestilence and led them from the enshrouding darkness of a plague-stricken past to the sunlight and the happiness of a pest-free and salubrious present. And so has she rejoiced in their triumphs, and in the blessings of peace, of health and prosperity.

In medical education the hospital and the schools are inseparably united in the discharge of their mutually interdependent functions. One without the other could not exist without failure of its mission in the proper care of the sick. The hospital is as necessary for the proper training and education of the doctor as the ship is necessary for the training of the sailor, as the locomotive for the engineer, or the aeroplane for the aviator. In none of these, as in all the higher arts and trades, can efficiency be attained without the material agency or instrument upon which the intelligence can accomplish its objective purpose. And so it is in Medicine; no amount of theory or of book learning can make a good doctor. There are no "correspondence schools" for the making of doctors. It is only in the clinic and at the bedside of the hospital that the physician learns his art and applies his science. As Dr. Stone once said of surgeons: "Those who would learn to operate by looking at plates and reading text books, should be allowed to operate solely upon them." On the other hand, the hospital without the doctor could no more function than a ship sail without a crew of trained seamen, or the locomotive move without the engineer; or the aeroplane fly without the aviator. It is in view of these mutually dependent and inseparable relations that in speaking of medical education in Louisiana we must include the hospital as one of the essential factors in its progress and development.

The foundation of the present Charity Hospital in 1832, and of the medical college, now Tulane, in 1834, are coincident and contemporaneous events: The history of these two institutions in their evolution as social and humanitarian units founded by the State for the promotion of medical education and the dispensation of medical relief to the indigent of the community and the commonwealth, is so closely interwoven that they cannot be detached without mutilation of either or both. During these 100 years, the reputation and fame of the Charity Hospital, as a home for healing, has been based largely, almost wholly, upon the achievements of the great masters of the school and their pupils, who have taught and flourished within its walls. The history of medical education in Louisiana would be almost a blank and colorless record without the deeds of the illustrious men who as teachers or graduates of Tulane have furnished the background and the backbone of the medical history of the hospital.

* * * *

Though it is beyond the purpose and scope of this address to tell the story of the Charity Hospital, please allow me to interpolate a personal note in appreciation of the fundamental and vital role that it has played as the coadjutor and collaborator of the medical school in the history of medical education in Louisiana.

The marvelous development of the Charity Hospital from the modest legacy of the humble French sailor, Jean Louis, in 1736, and the larger foundation established by the philanthropic Spaniard, Almonaster, in 1786, to the stupendous growth that it has attained at its present site under the patronage and favor of the State, is known to all and needs no rehearsal here.

During the 54 years that I was actively connected with its service, including the years

of my internship from the winter of 1877 to 1880 and from 1880 to 1929 as visiting surgeon and professor of surgery at Tulane, I have been a witness and participant in its rise and development, and no one can testify more willingly and gladly to its vast and incomparable resources as a treasure house for the study of disease and injury than I. And no one, I dare say, during my time, has striven more industriously and faithfully to make known by word of mouth and printed page, the incalculable profit that medical science and art have derived from the experience gathered in this marvelous repository of human pathology.

Despite the bane of politics, which, with rare exceptions, has always permeated its administration, the Charity Hospital is a great and noble institution and worthy of its rank as one of the greatest charities in the world, and when viewed in the light of its medical history and its vast philanthrophy, is deserving of the monumental place that it occupies in the history of the state and of the just pride with which it is regarded by the people of Louisiana.

I shall always gratefully remember the years that I have lived in its service, which were those of my greatest and most fruitful professional activities. I shall always treasure the warm and enduring friendships that have sprung out of my association with its personnel and with my colleagues in those years of arduous and incessant, but invigorating and happy travail. No matter how radically I may differ from the policies that have governed the administration in recent years, my love for old mother Charity, as I have known her, will always remain loyal and true to my affections.

* * * *

And now to continue with Tulane and the story of her achievements. It is the men taught and trained by Tulane at the Hospital who, from generation to generation, have supplied the bulk of the medical aid and guidance to the people of New Orleans, of Louisiana, and of many of the Southern States. During her century of existence, Tulane has given birth to 6500 medical graduates and sent them to the world as missionaries of health and healing. In the last census of 1933, fifty to sixty per cent of the physicians and surgeons of Louisiana are graduates of Tulane. The medical men who figure in the administration of the Hospital, its house surgeons, its resident and visiting staffs have been and are, for the greater part, graduates or teachers of Tulane. Many of her sons have been called to occupy professonal chairs and other posts of distinction in universities, hospitals and medical institutions of other states and in the medical schools which at various times have been established in this city, including in this category the medical school recently implanted in the Charity Hospital by Governor Long, and of which the dean and leading professors are graduates of Tulane.

Moreover, the names of the Louisianans best known and most honored in the medical world abroad are those of graduates of Tulane.

Again, the members of the Orleans Parish and of the Louisiana State Medical Societies, which stand today as the recognized exponents of organized medicine in Louisiana, need not be reminded that these organizations owe their foundation and early development to the initiative, the influence and eloquent advocacy of the great leaders and medical statesmen—Chaille, Bemiss and Richardson, professors at Tulane, who rallied the medical forces of the state fifty-seven years ago, for the consummation of this great end.

Finally, all that is important in the medical history of Louisiana in the century of education that has just come to a close, is, with relatively few and notable exceptions, inseparably wrapped in the traditions, labors and achievements of the teachers and the Alumni of the Medical School of Tulane. Hers is the glory that she is the mother of medical education and of modern scientific medicine in Louisiana, and in this alone

"She has achieved a tower of fame
More durable than gold,
And loftier than the royal frame

Of pyramids of old,—
Which none inclemencies of clime,
Nor fiercest winds that blow,
Nor endless change, nor lapse of time,
Shall ever overthrow!"

THE PRESENT STATUS OF SURGERY IN GALL-BLADDER DISEASE*

LESLIE V. RUSH, M. D.
and
H. LOWRY RUSH, M. D.
MERIDIAN, MISS.

If one of us operated upon a sixty year old individual for empyema of the gall-bladder we would, most likely, expect an extremely stormy convalescence. This would be warranted not only by the virulence of the infection in the gall-bladder itself but because other serious pathology would likely be associated. There might be pericholecystitis, liver changes, cardiac involvement or, perhaps, nephritis.

This individual has reached the so-called, terminal stage of cholecystic disease. By the terminal stage, we mean empyema, gangrene or perforation. Had this individual been seen a few years sooner, say at forty years of age, we would, very likely, have found a gall-bladder with evidence of a chronic inflammation of its wall, perhaps, with stone formation and obstructive symptoms which were characterized by attacks of colic and severe epigastric distress but without complicating pathology. The individual at this time would have been a good operative risk. But, should we have been fortunate enough to have operated upon this same individual, still earlier, between the ages of twenty and thirty, our patient would have been a most excellent surgical risk and the pathology would have been limited to the gall-bladder itself with only a catarrhal inflammation of the mucosa or wall of the gall-bladder. At this time he would have complained of symptoms of mild epigastric distress with belching and a feeling of fulness after meals, and should the inflammation have been more prolonged he would have suffered with mild attacks of epigastric or right hypochondriac pain.

DIAGNOSIS

The necessity of a thorough history, physical examination, leukocyte count and urinalysis is, of course, universally appreciated. The van den Bergh test is of some value but is not wholly reliable. The most valuable single diagnostic laboratory test is the icterus index for the determination of the amount of bile present in the blood. Duodenal drainage with examination of the crystals obtained is strongly advocated by some men and considered by them of great diagnostic significance. Many men, however, consider it of little value and, consequently, it is not stressed here. The presence of calcium stones, or cholesterin stones in the duodenal drainage strongly suggests cholelithiasis.

A roentgen ray examination during the presence of jaundice is of no value except as an effort to cast the shadow of stones on a plain plate of the abdomen, not using the gall-bladder dye. As in all roentgen ray work, the value of radiographs is in direct proportion to the accuracy with which the plates are interpreted. Presuming that the plates are properly interpreted, positive radiographic evidence of cholecystic disease is estimated to be accurate in about ninety to ninety-five per cent of the cases. On the contrary a roentgen ray report negative for cholecystic disease is accurate in but seventy-five per cent of the cases. Also, a well founded clinical diagnosis of gall-bladder disease checks up correctly at laparotomy in seventy-five per cent of the cases. Consequently, a clinical diagnonis of gall-bladder disease plus a positive diagnosis by the roentgenogram of cholecystic disease can be considered reasonably definite. However, should a clinical diagnosis of cholecystic disease be made and the roentgenogram not give definite evidence of disease of the gall-bladder, the greatest reliability should be placed upon the clinical diagnosis. It is believed that the roentgen ray findings are more accurate when the gall-bladder dye is administered intravenously. This procedure is troublesome and not without danger. The majority of the men today are using the oral administration of sodium-tetra-iodo-phenolphthalein.

As many of us study our own gall-bladder

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*Read before the Section on Surgery, at the Sixty-seventh Annual Session of the Mississippi State Medical Association, Natchez, May 8, 1934.

cases with the roentgen ray it might be interesting, here, to review, briefly, those points upon which a roentgenologic diagnosis of gall-bladder pathology can be made. A gall-bladder which contains stones is pathological. Normally, a gall-bladder should show a good concentration of the dye within fourteen hours after the oral administration. One hour following the fat meal it should be contracted and the dye appear more concentrated. The normal gall-bladder empties itself of the dye within twenty-four hours. A gall-bladder which does not meet these physiological requirements may be considered diseased. Also, we may suspect cholecystic disease if the gall-bladder does not take the dye well, if the contour is not smooth and symmetrical or if certain irregularities are present suggesting adhesions to the gall-bladder. It is well to repeat this fact that in the presence of jaundice the functional roentgen ray tests are of no value.

SURGICAL INDICATIONS

It is not my desire here to arouse the old argument of cholecystectomy versus cholecystostomy. Rather, I wish to give a cross section of the opinion of a great many men in this country, perhaps, tempered to some degree with our own experiences. In those cases in which it is applicable cholecystectomy is universally considered the operation of choice. Cholecystostomy should be limited to those cases such as bad risk patients, gall-bladders which are extremely difficult to remove and those cases in the hands of inexperienced operators. Cholecystostomy or cholecystectomy with common duct drainage is applicable to those cases with associated hepatitis, cholangitis or pancreatitis. The one most important surgical indication is to treat the biliary tract with surgery rather than limit the operative attack to the gall-bladder alone, it being our purpose to restore the biliary tract to a normally functioning system. The present tendency is to treat the acute gall-bladder as a surgical emergency with cholecystectomy, if possible, basing this upon the judgment of the surgeon. Jaundice is also felt to be a surgical emergency requiring reasonably early operation rather than procrastination. Constantly deepening jaundice, in the presence of clinical diagnosis of common duct obstruction, is a most definite indication for early operation. Obstruction of the duct, from any cause, indicates the clearance of the duct if possible, and if impossible, short circuiting of the bile by cholecysto-gastrostomy. In the extremely bad risk if bile is reaching the gall-bladder and a short circuiting operation is considered unwise, simple cholecystostomy should be done. Pancreatitis, which is frequently overlooked and which should always be searched for, indicates drainage of the gall-bladder or common duct.

DISCUSSION

In this paper we have purposely attempted to omit details, technic and statistics in an endeavor to give our own interpretation of the present status of surgery of the gall-bladder in the light of recent literature. There are a great many statistics relative to the frequency of occurrence of cholecystic disease and relative to the mortality of the various operations in the respective phases of the disease. It has been rather definitely shown that one person out of each three above ten years of age has cholecystic disease in some phase. Many of these cases, over a period of years, will progress until the terminal stage has been reached. Others will reach the second stage with stone formation and may or may not have symptoms. Others may not progress beyond the first stage of cholecystic disease. It is not reasonable to assume that all these cases will give definite symptoms or will ever require cholecystectomy. We all know that with cholecystectomy in the terminal stage the mortality may even reach as high as twenty-five per cent; we know that in the secondary stage the mortality is apt to vary from five to eight per cent and that in the primary stage the mortality is not apt to exceed two or three per cent and may even be less. There is still a great question in my mind as to how frequently operation for cholecystic disease should be advised. The value of early operation is most definitely shown in the pathology that follows the existene of cholecystic disease over a period of years and in the rapid increase in the mortality as the disease progresses from the first to the second and to the third stages. The important part the gall-bladder plays as a focus of infection which may involve other organs both by direct extension and through the blood stream, resulting particularly, in hepatitis, cholangitis, pancreatitis and myocarditis is at

present well appreciated and we feel, most definitely, that disease of the gall-bladder is most frequently overlooked and that many individuals could enjoy a much healthier existence and much longer lives if the condition could be recognized at an earlier stage and taken care of when the danger of operation is at a minimum. On the other hand, I realize, thoroughly, that such a radical attitude would result in many unnecessary operations and, perhaps, some persons would be sacrificed on the operating table who might, otherwise, enjoy a normal existence.

DISCUSSION

Dr. George A. Hendon (Louisville, Kentucky): This subject presents so many angles for consideration that it is difficult for me to decide which one to choose to fill the brief space that I am allotted. It is impossible to present in a cursory manner and without previous preparation any part of it in an exhaustive manner. However, I think that the burden of discretion in the gall-bladder case rests most heavily with those who are deeply jaundiced. This problem involves immense responsibility, it matters not from what cause the jaundice has arisen. If it is due to mechanical obstruction of the common duct the relief appears to be so simple and available that one feels an irresistible impulse to relieve the obstruction by an operation that will establish drainage.

It is necessary to exercise all of one's self control to avoid being led into this trap. These patients require more careful preoperative care and preparation than a toxic goiter. I met a colleague of mine in the hospital a few days ago, who inivited me to see a patient of his upon whom he had recently operated and he called my attention to the fact that he had never seen a man drain so copiously. He estimated the bile drainage at five pints in twenty-four hours. The consequence of it was that the patient soon drained himself out of existence. This experience is so often met with and the urge to provide relief through drainage is so insistent that it required the greatest degree of resistance to keep from doing an immediate operation. We feel that we have a method by which these cholemic patients can be prepared and their margin of safety very much enhanced. Our plan consists in the administration of glucose solution 10 per cent by a method called venoclysis. We think we have the best plan of administration that has ever been evolved. The reason that I make this bold statement is that we have been able to maintain patients without food in the alimentary tract for as much as twenty-one days, in a state of unimpaired physical prosperity. And as glucose is a substitute for some of the functions of the liver this important organ is thereby relieved of a large fraction of its work and allowed to devote its energy to combating whatever poison with which it may be invested.

To begin with, we expose a vein and insert a cannula which we have devised for that special purpose. For an adult we use a 12 gauge size with openings on the side to provide an additional element of safety. This cannula is ligated on each side of the shoulder with which it has been provided for that especial purpose. We find umbilical tape to be the best material for this purpose. I would like to add here that we have found needles to be thoroughly inadequate and totally unfitted for this work. They soon became obstructed or penetrated through the vein. If used as described About thirty drops a minute is the maximum that use of splints or other restraining apparatus. As a reservoir for our glucose solution we use thermos bottles suspended about six feet from the floor on a specially constructed stand. The bottles are connected by means of a delivery tube, (into which has been set a Murphy dripper), so that the rate of flow can be kept under inspection. And rate of delivery is adjusted to the tolerance of the patient. About thirty drops a minute is the maximum that can be tolerated by most patients. This point is the most important of all. We have long since learned that so-called glucose reactions depend entirely upon the rate of delivery. The physiological rate for each patient must be established independently. Every person differs in glucose tolerance, at the same time each individual furnishes an index to his own glucose tolerance by his range of temperature. When the temperature goes above 100°, we know that the limit of tolerance has been reached. And the rate of flow should be reduced until the temperature remains between 99 and 100°.

In our experience, we find that the veins at the elbow will last for our purpose about five days, although in some exceptional instances we have been able to carry it as much as ten days. The ankle vein will only last four days at the longest. However, the number of veins available for this work will give an ample opportunity to sustain the patient as long as one may think is necessary.

People who are deeply toxic, like those suffering from septicemia will tolerate almost twice as much glucose as those without blood stream infections. Fourteen pounds of glucose in twenty-one days is the most we have ever given any one patient, although we have given nine pounds in five days and eleven pounds in six days. We have found that this method of preparation is the plan best suited both pre-operatively and post-operatively for all our jaundiced patients.

TREATMENT OF CHRONIC SINUSITIS*

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This subject was selected, not with the idea of presenting something new, but hoping that in rehashinig this old and often written on subject, we may elicit a discussion that will be beneficial to us as well as our patient.

For the purpose of this paper we will not consider the preceding acute attack and will only mention briefly the causes and symptomatology.

Roughly, we consider any diseased condition of the sinuses as chronic that is of more than two months' duration. The cause of the chronic condition may come under three heads:

(1) Nasal obstruction—usually a deflected septum.

(2) Lack of, or insufficient treatment during the acute attack.

(3) Diseased or abscessed teeth.

These patients usually come to us with a history of an acute cold and sinus attack and complaining at the time of headaches, a low grade pain over the affected area, of a chronic nasal or post nasal discharge, and usually a rundown general condition. Removal of the nasal obstruction and of any abscessed teeth should be the initial procedure in the treatment of any chronic sinus. Needless to say the diet of the patient should be studied and his general condition carefully considered. In many of these cases we are dealing with an allergic condition where surgery is contraindicated, and the sensitivity of the patient should be carefully investigated.

In those cases that have had no previous treatment intranasal treatment with irrigations of the sinus may be sufficient to effect a cure. However, in most cases of chronic sinus disease, natural drainage is insufficient and surgery is necessary. The type, the time, and the extent of this surgery is the reason for this paper. We believe that the prsent ill-repute into which operations upon the sinus have fallen among both the laity and the general practitioner is due to ill-advised and poorly executed surgery on the part of the otolaryngologist. We see too many patients come into our offices with a chronic nasal discharge and a crusty nose because some over-zealous rhinologist has removed her ethmoids for an unexplained headache or because a roentgengram showed a density in the ethmoid area. But even where there is a definite infection of the sinuses, the mere fact that it is of long standing does not mean that radical surgery is absolutely necessary. In fact in only two conditions can we say it is necessary and that in the presence of bony necrosis, and new growths. In all other cases the patient should be given a chance to get well under conservative treatment. Proper ventilation and drainage are necessary for a healthy sinus and in chronic conditions surgery is usually necessary to get this. In doing our surgery it is well to remember that no nasal tissue can be replaced once it has been removed, and unless you can replace a diseased membrane with one that is better you are not benefitting the patient.

The maxillary sinus is the offending sinus in the vast majority of cases, and even where there is a pansinusitis, it is usually the base of the disease, the other sinuses becoming involved subsequently and often by direct infection from its drainage. Due to the comparative isolation of the sphenoid and favorable location of the frontal for drainage they are less frequently involved than the antra and ethmoids. So as the site and source of most chronic sinus infections the antrum will be discussed in more detail.

If the patient with a chronic antrum has been under careful treatment over a period of four to six weeks without relief we can be practically sure that drainage is inadequate and surgery must be resorted to. The operation of choice here we think is a large

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naso-antral opening in the inferior meatus well back on the sinus wall and extending down to the nasal floor. We then pack the antrum with iodoform gauze and use iodine powder in our post-operative treatment. Failure of this operation is due most often to the opening being too small and placed too high on the nasal wall, so that we get an accumulation of secretions on the floor of the sinus. Where there is an accompanying ethmoiditis and frontal infection the anterior tip of the middle turbinate can be removed, the ethmoids opened, and the naso-frontal duct enlarged at the same operation.

The above operation or operations will give free ventilation and drainage, permit easy irrigation and direct inspection and medication, and in a great many cases will effect a cure with a healthy, living mucosa and a minimum of damage to the nasal structures.

If the above procedure are not effective in a period of three or four months, the ciliated epithelium of the sinus has been destroyed, there is probably polypoid degeneration or bony necrosis, and permanent drainage must be secured with removal of the diseased tissue.

In any radical sinus operation whether on the antrum or the frontal we believe the entire lining membrane should be removed. We have been unable to distinguish the healthy tissue from the diseased in those cases of long standing coming to operation and believe that many failures of the operation are due to a partial removal only of the mucosa.

Of the operations on the antrum we prefer the Caldwell-Luc either under local or general anesthesia, the latter being more satisfactory in our hands. Care should be taken not to injure the roots of the teeth in going through the canine fossa, and pains should be taken to remove all tissue from the angles and irregularities of the sinus wall. The opening into the nose should be made large enough to remain permanently open. If there is involvement of the ethmoids and sphenoids, and there usually is, they should be well cleaned out. A pack of iodiform gauze takes care of postoperative bleeding and stimulates healing of the cavity. Very little post-operative care is necessary after the period of hospitalization.

In many cases of chronic pansinusitis the frontal sinus will clear up following the Caldwell-Luc operation on the antrum. So it is well to allow some time following this before advising radical surgery on the frontal. We advise radical operation on the frontal only where there is evidence of bony necrosis, a draining sinus to the outside, or symptoms that demand relief. We seriously doubt the wisdom of doing a radical sinus operation to relieve a chronic nasal discharge.

Of the frontal operations we prefer Lynch's modification of the Killain operation. In this operation the periosteum of the frontal bone is not disturbed and hence the danger of an osteomyelitis is not so great. The dangers in this operation are injury to the eye and fracture of the cribriform plate. The success of the operation depends to a great extent upon two factors, namely removal of all diseased tissue from the small angles of the sinus and establishing of permanent drainage into the nose. The first is a matter of careful technic. Closure of the naso-frontal passage following operation is due to granulation tissue. This can be prevented by leaving the interior bony wall of the naso-frontal duct undisturbed and leaving in place against it a large rubber tube drain. This tube should remain until a fleshy canal is well formed, usually a period of six weeks to three or four months. The post-operative course is usually stormy and the drainage tube must be kept well opened. This constitutes the greatest part of the post-operative care so far as the sinus is concerned.

In conclusion, let me say that a careful study of each individual sinus case, careful, conservative treatment in our early cases, and thorough, conservative surgery in our operative cases will go a long way toward improving the status of sinus surgery, and more important, giving our patients relief.

DISCUSSION

Dr. C. A. McWilliams, (Gulfport): Dr. Hughes has covered this subject so far as surgical treatment is concerned very well. I agree with everything he has said. The main thing I think in sinus infection is to first impress upon the patient that when they once have a sinus disease they will

probably always have it, no matter whether they are operated on or whether they do not have an operation. It is very important to impress that on the patient all the time, especially if you have an idea of doing any kind of operation, because there are very few cases in my experience, that are cured; in fact I never use the word "cured". I am just about as afraid to tell a patient that I am going to cure him of sinus trouble as the patent medicine people are to put that on a bottle of patent medicine. They always say this medicine will relieve such and such a thing. I always use the word relieve. If you promise to cure a patient they expect to never have another cold, and if they do have a cold or headache, or some flare-up in the sinus, they will say the operation was a failure.

Of course a thorough study of the patient is the most important factor so far as the operation is concerned. I think we are all getting more conservative as far as the sinuses are concerned. Some of the cases come in with a post-nasal dripping, a dull headache, or repeated cold due to some systemic infection. For these low-grade sinus infections I frequently use the Proetz method of irrigation of the sinuses. That will satisfy most of those chronic sinus cases that have just a little trouble every once in a while. They will come back often for treatments and very often you can relieve them without any surgery. So far as the surgical treatment is concerned I follow the plan outlined in Dr. Hughes' paper. Where radical surgery is required I believe we get the best results with the Caldwell-Luc operation. You have to impress upon the patient that they have to come back every time they have a cold to have the antrum irrigated. There really is not anything new in these chronic sinuses, as I see it, except that we should be particular and take a little more time and explain to the patient that many of them may have an allergic condition, and even after the diseased lining is removed they may continue to have some trouble until their whole general system is built up. This is what we have to put across to the general practitioner, and the laity, that these recurrences are not the result of the operation but they are the result more of a general infection from somewhere else. I think if we educate the patient and the general practitioner to that fact, the sinus operation will not be in such ill repute as it is now, because most patients when you speak of an operation, always bring it up that they never have heard of anybody being cured by a sinus operation. The best results are obtained in not only treating the sinuses but the whole body, always working with the family physician. He can very frequently do more than we can to relieve the sinus infection.

Dr. R. C. Smith, (Natchez): It has been a pleasure to have the honor to discuss Dr. Hughes' paper, and there is nothing that I know to add. The only point that I would like to bring out is the relation of chronic sinusitis in the face of allergy is the basic cause of the sinus trouble; in other words, I mean if there were not allergic conditions in the nasal mucous membrane, possibly the drainage would not be blocked early in life, and, therefore, under normal conditions there would no sinus infection. And it is brought out more and more every day that interference in the face of allergic conditions with surgery only leads to grief. To cover such a large subject as chronic sinusitis in such a concise and thorough manner is subject for congratulation to Dr. Hughes.

Dr. Edley H. Jones, (Vicksburg): Like the other doctors, I want to compliment Dr. Hughes on his conservatism.

One diagnostic procedure that is of value in determining when a sinus should be operated upon is a microscopic study of the cells from a washing of the sinus. That will often determine when surgery should be performed.

Dr. Hughes mentioned anesthesia only in passing, but I differ from him in that I think local anesthesia is to be preferred in all sinus operations except those on the frontal, because of the smaller loss of blood and of less shock to the patient.

He mentioned enlarging the naso-frontal duct intranasally and that is one procedure that I have always felt had a questionable value. It is so easy to get so much scar tissue that when it contracts you have a smaller opening than before you went in. I think it is a procedure that very often fails to attain the desired results.

Dr. McWilliams' statement that "once a sinus, always a sinus" is frequently true and I agree with him that the patient should be approached in the manner which he described, but I do not feel that his statement is necessarily always true. I think the determining points are first, to eliminate allergy and by the way, I am glad that otolaryngologists are so allergy-conscious now. Secondly, I think that when once we are convinced a sinus is sufficiently diseased to require surgery, operation should be performed at once. We should not allow the pathologic process to continue for so long a time that there will be a metaplasia of the tissues that will lead to poor results. If we operate from those cases early, I believe we will have a better chance of actually obtaining a cure.

Dr. D. C. Montgomery, (Greenville): It is true already of the general practitioner, of the laity, and I think possibly some of our eye and nose men are beginning to feel that there is something lacking in sinus surgery that gives it its bad repute so far as the results obtained are concerned.

I cannot accept that feeling, that view at all. I

am of the opinion that in a definitely uncomplicated sinus condition that surgery gives as good results, or perhaps better results, than any other class of surgery.

I would like in connection with this to impress the point that Dr. Hughes brought out, that Dr. McWilliams also spoke of, the fact that your individual patient must be clearly and definitely studied. I think most of us fail to give the patient the examination and the necessary study to determine exactly what condition may be present. I wish to emphasize that a great many of these patients are primarily allergic in type. These patients of course do have frequently a secondary infection involving the sinuses. As far as the work on the sinus and the secondary infection is concerned, we get very definitely good results. We do not emphasize the point to the patient that the case is an allergic one, and that all we can hope to do by way of surgery is to relieve the infection, the suppurating condition that is present, but that other treatment along allergic lines is necessary to take care of the underlying allergic condition that is present.

One more point is the fact that we have failed to fix the border line, or the line that separates allergy from a constitutional condition such as a spastic colitis or gall-bladder disease. Frequently these conditions overlap and what we sometimes think is an allergic condition is an auto-intoxication from somewhere in the gastro-intestinal tract.

These cases also do not respond well, and the results are not as excellent as they might be unless we take in the constitutional condition that is underlying the sinus condition present, and have our internist to take care of that also. I think when we stop considering all sinus conditions as local disturbances and study them in their relationship to constitutional conditions, we may get somewhere. There is only a certain percentage of sinus conditions definitely due to a localized infection, and surgery easily remedies them. When we take the view that the whole body is connected and that the internist is a necessary adjunct; when we combine that treatment as we are now doing with allergy and with surgery, then we will get real results in practically 90 per cent of all our sinus cases.

Dr. Geo. E. Adkins, (Jackson): I appreciate Dr. Hughes' paper. I was familiar with it before he presented it to the section. Dr. Hughes and I are rather close together and have been for many years. Although he is the younger he knows pretty well how I feel about him.

With reference to sinus surgery, I must admit that I am not as enthusiastic as the average man, or at least it appears that way to me. I remarked a few days ago in the presence of those associated with me that if I lived and practiced medicine another twenty years as actively as I have within the last twenty years that I possibly would operate radically upon five to ten more sinuses. In my training I was taught that 95 per cent of eye, ear, nose and throat work was surgery but, in my mature years, I differ with this teaching very materially. It is my opinion that we must get away from surgery alone and study medicine and pathology as well as surgery. It is lamentable, but apparently a fact, that about the only cases of sinus infection that have improved to more or less of a satisfactory degree are those who have had radical operations. Of course there are a few cases who do not get well under treatment but apparently the greater percentage of them do, at least, a much greater percentage gets well following treatment than a radical operation and this is why I think, when we begin to study medicine and pathology and take into consideration the general condition, that we are most likely to advance more rapidly.

The public seems to be well sold on the idea that all headaches come as a result of sinusitis. There are days in my office that I am a little inclined to get resentful when they announce, on entering, that I must have a sinus trouble, when my records show that just two per cent of these who think they have sinusitis actually have it to an extent demonstrable by me, and as long as I know of no single disease that is not attended with a headache I hold this as a symptom practically without value.

Again, I should like to record myself on the side who feels that the study of blood changes, including blood chemistry, and a thorough consideration of vitamin balances along with the consideration of many allergies that we might encounter, that it will be a great advance in the step of considering sinus infections.

Dr. C. C. Buchanan, (Hattiesburg): I have certainly enjoyed Dr. Hughes' paper. This discussion has been most interesting. I must say I am very much like Dr. Adkins, I have never been a blood thirsty surgeon. I believe that there is too much sinus surgery done. I have a patient who comes to me occasionally, who has had 15 sinus operations done. I did not happen to be guilty of any of these operations, but she told me a few days ago that if she had what had been cut out of her head back in it she would certainly keep it and not be operated on, and I think she would be justified.

Aside from the allergic condition I think Dr. Adkins brought out a very important point, that the cause of supposed sinus pain or pain referred to the head, is often due to some remote condition far distant, and I believe the tide is changing now away from the surgical side and to a better investigation of these conditions, and when we do this in a thorough way I think we will certainly get much better results.

I believe that aside from the allergy conditions when we establish free drainage and secure adequate ventilation we have done all we can do.

Dr. Hughes, (closing): I want to thank all the gentlemen for their discussion and it has brought out about what I wanted and expected to bring out. I remember I think the first time I attended this section back about six years ago, we had a paper, very radical, on sinus disease in children, and most of us got up and endorsed it. Now I think the reason for that is this: I think we used a word in discussion that we should not; we say too much sinus surgery; I think there is too much nasal surgery. When they taught me my technic if we had a chronic or even infected sinus, we went in and removed the middle turbinate all the way down. It was not diseased in 99 per cent of the cases; we just took that off to get the ethmoids, and that is where we started trouble. Every time we remove even the tip we get an irritated condition. I think there is a definite place for surgery in chronic sinus disease. I think where you have polypi, degeneration, or badly thickened membranes that there is a definite place for surgery. I don't think we should go too far or say we can treat all by medicine because I don't believe we can. If the membrane has been bathed in pus for a long time, and if the ciliated epithelium has been destroyed, and we do not have a natural opening, —we must have that to get rid of the normal secretions, something has to be done, and that I think is the place for our surgery.

I want to mention a little about allergy. I believe that a great many of our cases, many more than we suspect now, are allergic. I had a patient in my office a couple of weeks ago that complained of sinus trouble for two years. A doctor had operated on him two years ago, and he had not gotten any better. I do not know what the operation was; I could not see any disturbed tissue; he had not taken any picture. The man had definite muco-pus in both sides of his nose. I had a roentgenogram made of his sinuses, perfectly clear, purely an allergic condition, but he had been going around telling people for two years that he had an operation and did not get any better. I will not agree with Dr. McWilliams that once a sinus always a sinus. Maybe our idea of a sinus is a little bit different from that of Dr. McWilliams. I do not mean that we can clear up every bit of the discharge and give him back a normal nose, because when it comes to a post nasal discharge most of us have it anyhow whether we ever had sinus or not, but where we are having definite pus and pain I think that part can be relieved and to all practical purposes cured.

THE ACUTE MASTOID*

R. A. CLANTON, M. D.
GRENADA, MISS.

The term acute mastoid is here employed to define an inflammatory process attacking the tissues of the mastoid antrum and mastoid cells.

Almost invariably the disease originates in a like process which has first developed in the tympanic cavity, the extension being by contiguity through the aditus.

We refer to acute mastoid infection being caused by trauma over the mastoid area or from an infection of the external auditory canal only to dismiss such causes from our immediate consideration, since an infection of the mastoid cells from these causes is so rare.

The amount of pathology and degree of destruction depends upon the virulence of the infecting bacteria, the duration of infection and upon the patient's resistance.

The most important symptom of an acute mastoiditis is *pain* in the ear and just behind the ear over the mastoid.

The contiguity of the mucous membrane lining the mastoid cells and antrum with the tympanic cavity having long since been established, it follows that the mucosa of the mastoid antrum and cells usually becomes involved to some extent in every case of acute purulent infection of the middle ear. In the majority of cases the purulent invasion of the mastoid quickly subsides, in response to free drainage and resolution of the inflammatory process within the tympanic cavity. However, in a certain per cent of cases the inflammation does not subside—resolution does not take place, but suppuration continues. This is what I mean by "the acute mastoid".

The diagnosis of acute mastoiditis is not always easy, as you gentlemen know. Sometimes it taxes all of one's ingenuity to make the differential diagnosis. One must take into consideration many things including the patient's age and temperament. We sometimes have to eliminate the possibility of an infected

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wisdom tooth, an acute tonsil, acute suppuration of the sinuses, an acute abscess in the external auditory canal or perhaps a neuritis.

The symptoms are in most cases pronounced, pain being the chief subjective symptom. However, we encounter patients who are suffering from an acute mastoid in whom the pain is almost nil. In such patients we account for this by a very free and profuse discharge from the middle ear. Deafness and tinnitus are often present, the tinnitus being at times most aggravating. Swelling behind the affected ear is often present and tenderness over the antrum and usually over the mastoid tip has always been present in the patients who have consulted me. In some cases I have seen the swelling behind the ear very pronounced. I remember having seen one patient, an elderly ignorant man, who came to me because of a large soft mass behind his left ear. Upon examination I found a slight discharge from the middle ear, post-superior wall of the auditory canal was markedly swollen, almost to blocking the canal. He gave a history of having had a cold some three months previously and a slight earache, said the ear soon began to discharge and he had no ear trouble since. However, a careful examination proved to me that he nevertheless had a purulent mastoid, with a periosteal abscess resulting from destruction of the cortex. He refused operation but agreed to return to office for observation. Within a few days the abscess ruptured through the wall of the postero-auditory canal, and the swelling very promptly disappeared from behind his ear. He dismissed himself from further observation and I hear from him every now and then telling me that he has had no further ear trouble. A rare case where nature relieved the ignorant.

Nature does not always relieve, we must help. Sometimes we must study our patient for days, even weeks. Blood counts may be significant; the roentgenogram when properly used and expertly interpreted may prove the diagnosis of a purulent mastoid.

Having made a diagnosis of acute purulent mastoiditis, the treatment is obvious. There is but one safe treatment and that is an operation.

The operation for mastoid is rightfully regarded as a major operation. If carefully done it should not be more dangerous than any other major operation.

I shall not burden you with the technic of a simple mastoidectomy. Only those who are familiar with the anatomy of the ear, who have mastered the technic for simple mastoidectomy, and who are courageous should attempt a mastoidectomy. I personally think that the surgeon doing a mastoidectomy should not be a laggard. I also think that he should not be so fast that his quickness would keep him from being thorough in his work. He should not be satisfied in simply making a hole in the cortex, removing a few cells and finding his way into the attic and middle ear but he should remove a sufficient amount of the cortex to enable him to attack and remove all the mastoid cells, if such cells are pathologic.

I will say that in most of my mastoidectomies that I usually pack the cavity with a single strip of iodoform gauze, close the wound, and daily thereafter remove a small amount of the iodoform pack, allowing the wound to heal from below.

I have operated upon patients ranging in age from two months and seventeen days of age to those past the three score and ten years of age. In all of my patients the results have been most gratifying.

DISCUSSION

Dr. E. Le Roy Wilkins (Clarksdale): I enjoyed reading, and have enjoyed hearing Dr. Clanton present his paper. Of course it is a subject in which we are all interested.

The doctor says that most cases show pronounced symptoms, which is true, especially in the older cases, yet, there are so many cases that show many pronounced symptoms and then clear up almost spontaneously, and in a very short time. Again, there are those cases that show so few symptoms and then flare right up in your face like 4th of July fireworks.

To me there are so few absolutely definite or pathognomonic signs and symptoms that one can definitely rely upon to always make an early diagnosis. Your blood picture may show very little if free drainage has been established, yet much damage may be present in the mastoid. A high poly count, if it is a disproportionate one, may well make you think of definite surgery, but if it is high, and there is a proportionate general increased leukocytosis, it only shows that there is a

well defined resistance on the part of the patient's system.

Pain and tenderness are usually present in children who have had a prolonged discharge from the ears, and in many adults, whether it be psychic, or real from canal inflammation and soreness, or mastoid, and may get you nowhere, except into further trouble.

Edema, in and about the ear, may mean only that there is a canal infection along with and because of the long contact of the discharge from, your otitis media. It may definitely simulate the "sagging wall". A straight furunculosis, without any involvement of the middle ear, may present a rather confusing picture in cases of weeping eczema, or where one or more have ruptured and are discharging.

The temperature, while it has some rather constant characteristics, shows so much variance in the different cases, that no chart can be used as a criterion.

The roentgenogram is usually of great help, but must be carefully made and studied by one who has seen not a few, both normal and pathologic, and then only in comparison and along with all other findings.

In fact, one must study all possible sources of information, and diligently, to make a diagnosis, early, and must have studied many cases of "running ears".

Many men operate with only a few of the more definite signs and symptoms, and fortunately for them, if they are pretty thorough in removing cells, they can show some pus or "bad blood" in most of their cases. You know that many of our best writers and teachers tell us that, as Dr. Clanton also told us, "there is always *some* involvement of *some* of the cells in the mastoid area, in any otitis media acuta."

Can you imagine my chagrin when once while in France I made a diagnosis of acute mastoid and saw my chief, who had concurred in the diagnosis, as had also the radiologist, open a horribly normal mastoid? I was glad that I was only assisting at the operation.

Dr. J. C. Adams (Greenwood): I will try to confine my remarks to diagnosis and make this very short, as I realize you are most tired. As Dr. Clanton stated a while ago pain is one of the most important symptoms. The location of pain has a great deal of significance, usually over the tip of the mastoid or over the mastoid antrum. This pain may be a deep boring pain or an intermittent sharp pain. We may have also another sign, a sagging of the superior canal wall. If we can interpret all these signs along with the subjective and objective symptoms, it is very simple to make a diagnosis of acute mastoiditis, but we never find them all in the same individual. A differential diagnosis as I see it is rather easy in most cases, and possibly in all cases; the only thing that I find sometimes that confuses me somewhat is an external otitis. We sometimes see a child, or a grown person for that matter, with a chronic discharging ear, with a superimposed otitis or inflammation of the canal and that sometimes is a little confusing, and I rely on a roentgenogram for a diagnosis then.

Temperature in children very often goes to 103° and 104°, and in grown people is usually much lower—101° and 102° without complications. The blood picture, of course, a history of the case and the nature of the pulse and pain, I mentioned is necessary.

I want to congratulate Dr. Clanton on his paper and Dr. Wilkins on the way they covered the subject. They did not leave much thunder for me to play on.

Dr. C. A. McWilliams (Gulfport): I congratulate Dr. Clanton for his excellent paper.

On the coast it seems that our infections are not so virulent as in the north and for that reason we have fewer mastoid operations. After making a free incision of the ear drum I'd make a careful study of the sinuses, especially the maxillary. It is my policy to treat these cases conservatively for some time before operating. Sometimes it is necessary to make a naso-antral opening to relieve the acute maxillary sinus infection before the mastoid will clear up.

Recently I had a case of a little girl who had a definite involvement of the right mastoid with profuse purulent discharge. There was also an involvement of the maxillary sinus on the same side. This condition had been present for over three weeks with severe pain. After washing out a large quantity of pus from the antrum I used the rasp as Dr. Adkins advised and in a very short while she fully recovered from her mastoid and sinus infection.

So far as these acute mastoids are concerned it is my practice to divide them into hemolytic streptococcus and the other group where it is due to mixed infection. In the first group they have a very high fever and chills and a scant discharge. But as a rule they do not have very much pain. This type of case usually requires operation and it isn't safe to wait very long before doing so. The ordinary acute mastoid should be watched for at least a week or ten days before operating. I learned from Dr. Lynch that if the discharge has stringy mucus in it, then it is a very good sign that it will get well without operation. It is always advisable to wait at least a week or ten days on the infections before operating unless the symptoms indicate some involvement of the lateral sinus. I never pack any of my mastoid operations with iodoform gauze but I use a large rubber tube with perforations. I find that there is less pain when

the wound is dressed and the scar isn't depressed.

I have removed the adenoids in children at the same time that I operated on the mastoids and found that it is good practice, it certainly lessens the infection in the middle ear and eustachian tubes. In a few instances I have removed large infected tonsils at the same time with good results.

Dr. D. C. Montgomery (Greenville): May I say just a few words on a most important subject. I agree fully with Dr. McWilliams that we should know definitely the causative organism behind an acute mastoiditis. To my mind this is most important. Particularly does this give us an idea as to the future probable course of the disease.

In every case of otitis media a culture should be made at the time of opening the drum and if we find we have a streptococcus infection then we should be prepared for complications, particularly an acute mastoid, which might become definitely destructive in a very short length of time. This is important too because of the fact that recently there has been a great deal of work done along the lines of developing an operation for the relief of petrositis—a new name for an old condition signified by the onset of severe headache and discharging ear.

Dr. Kopetsky and his co-workers in New York city have developed a rather complicated procedure for drainage of the pyramid, and I had the privilege of seeing a very skilled operator on a cadaver try to do this operation. He got once into the carotid artery and once into the brain, and he never did get into the right place. Of course when petrositis develops you have a very serious condition. Some cases have been reported recently of temporal brain abscess in cases where ears were absolutely dry at the time of operation on the temporal lobe for the abscess. All of these cases are a streptococcic infection which indicates that your infection may apparently be a very simple one and the patient recover from that, and yet a serious complication develop, and for that reason it is most important to know what organism we are dealing with and be prepared to go ahead immediately in those cases that show symptoms that are suggestive of an acute mastoid. If we do not do this, if we are not careful we will delay operation too long. There is quite a discussion going on now among a great many of the writers as to the time of operation in this type of mastoid, as to whether to operate in the first week or after two weeks, and the statistics they have produced seem to show the mortalities reach considerably higher in those that are operated on in the first five days. After the fifth day it seems to be safer to go ahead and operate upon these cases, and the mortality rate is really lower. Dr. Hamrick is not alone in the fact that he does not have many mastoids to operate upon. I have comparatively few to operate every year myself. I suppose I never have over ten to fifteen in any single year, except in the very unusual year of 1929 and 1930. A majority of these cases will get well with proper drainage and care of the patient. Most of them should be hospitalized and they should be kept in bed during the active stages.

May I take just a moment, as this is the last paper, to congratulate you, Dr. Arnold, on a most excellent program and also the essayists on their excellently prepared papers.

Dr. H. R. Fairfax (Brookhaven): What I wanted to ask about was a case that is not exactly a mastoid, on the same order, in a child who came to me, seven weeks old, and it developed that I diagnosed as a sub-periosteal abscess, and I opened it up and for a few days it seemed to do very well, but this discharge kept on and it has now developed a very offensive odor. A few years ago I heard Dr. Willard speak about letting grandmother alone with goiter. This child has bronchitis, a persistent cough and at that age I feel a delicacy in doing much of an operation, so I simply opened it up through the skin and the periosteum, about the middle, but I noticed yesterday in dressing it I could run a probe down through the mastoid. It seemed to be deeper than the other. Whether to let nature cure this as it will sometimes after you get free drainage, or whether to attempt to take off the cortex and give still further drainage, or let it do as it is and keep the outside wound open, I do not know. I would like for some of you who have had more experience to give me a few pointers on this.

Dr. Clanton (closing): I want to thank the gentlemen for their discussion. Of course I was only attempting to discuss the treatment from an operative standpoint of an acute mastoiditis. When I mentioned the acute mastoid, I wanted to emphasize the fact that the mastoid cells were infected by some definite agency, and that being the case, to my mind there is but one treatment, and I realize the fact that in acute middle ear disease the sensible thing to do is to operate and usually with free drainage the condition subsides, but when you have a purulent infection in the mastoid cells I do not know of but one thing to do, whether the patient is 7 weeks old or 70 years old. Do a good, clean mastoidectomy. I mean to remove enough of the cortex to enable you to get in and get all those mastoid cells wherever you have to go.

I realize that iodoform is objectionable to a great many people, patients sometimes as well as doctors, but personally I would not turn down a mastoid packing in operation with iodoform gauze for any other agency that I have ever heard of. When I find an acute mastoid and am convinced in my own mind it is a mastoid, I just don't hesitate to operate.

A CONSIDERATION OF DIAGNOSTIC CRITERIA IN HEART DISEASE*

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The diagnosis of heart disease may be simple or it may be extremely difficult. Many people are made unhappy and suffer deprivations and expense because a diagnosis of heart disease is made when as a matter of fact the heart is sound. On the other hand, some who really have heart disease are treated for other than cardiac disorders. For this reason it seems worth while to review the most reliable signs and symptoms of heart disease. Most symptoms and some signs are valuable only in directing attention to the heart as far as diagnosis is concerned. These same symptoms may be due to other causes. Shortness of breath, palpitation and pain in the region of the heart may be caused by neurocirculatory asthenia, gastrointestinal disturbances, anemia, the excessive use of coffee and tobacco and numerous other conditions.

In the first half of life physical signs are more important; in middle and later life symptoms may be more important in a given case. Serious heart disease may be present without physical signs. In a young person with symptoms pointing to heart disease, but in whom no reliable physical signs are present, we usually may assume that some other condition is to blame. In later life more study and investigation are necessary to come to the same conclusion.

The following are the most reliable physical findings in heart disease:

1. Definite enlargement of the heart.
2. Diastolic murmur.
3. Definite thrill on palpation.
4. Gallop rhythm.
5. Alternating pulse.
6. Pericardial friction rub.
7. Definite changes in the electrocardiogram.

1. In order to determine the size of the heart, if conditions permit, the patient should be examined either standing or sitting. The apex beat should first be located. If not readily seen, the flat of the hand should be placed over the precordia, thereby getting a fairly definite idea as to the location, then determining it more accurately by the finger tips. Normally this should be well within the midclavicular line in the fifth left intercostal space. If well outside of this line, especially in the sixth intercostal space, enlargement of the heart is present. However, in children and fat, short-chested adults with high diaphragms, the apex beat may be from one to one and a half cubic centimeters outside the midclavicular line in the fourth intercostal space and still be normal in size. It may be impossible to locate the apex beat in fat, thick-chested individuals or those with heavy breasts or with emphysema, in which case percussion should be resorted to. Since it is difficult to make an accurate determination in this way, fluoroscopy should be used or a six-foot roentgenogram made. If the borders of the heart are found displaced, one should determine the presence or absence of lung or pleural disease that might be pushing or pulling the heart out of its normal position. In thin people with long chests, with so-called dropped hearts, it may be more difficult to determine the enlargement. If there is a distinct heave over the precordia, cardiac enlargement is very likely. In some growing boys with thin chest muscles, while standing the cardiac impulse may be diffused and apparently outside normal limits. When they are lying down the apex beat takes its normal position. When it is impossible to determine the size of the heart by physical examination, and roentgen ray is not available, then the examiner should realize that one very important item is unknown to him and should act accordingly.

2. *Diastolic Murmur.* A diastolic murmur, or probably more correctly speaking, a diastolic rumble, heard at the apex usually means mitral stenosis. When we use the term diastolic we include the so-called presystolic or mid-diastolic murmurs. This sound at times is difficult to hear, but is of great importance. It may not be heard at all when the patient is standing and it may or may not be heard while the patient is lying on the back. Usually it is heard best while the patient is on the left side, especially if the rate was comparatively show before and

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is speeded up by slight exercise. It is especially likely to be heard the first few beats after assuming the left lateral position. In turning the patient from the back to the left lateral position, if the apex is displaced it should be followed with the stethoscope, as in many cases this murmur is heard only near the apex. With it there is usually a thrill of the same timing.

In one suspected of having mitral disease, either because of symptoms or a systolic murmur at the apex, this murmur should be searched for repeatedly. This same type of murmur is heard at times in large hearts, usually with aortic regurgitation or adhesive pericarditis without organic stenosis; and the accompanying thrill is unlikely to occur. This is so-called functional mitral stenosis.

A diastolic murmur due to aortic regurgitation may vary from a faint and inconstant to a loud blowing or even a musical murmur. In rheumatic aortic disease it is frequently heard better to the left of the sternum. In luetic aortic disease it is often heard best in the right second interspace. In both conditions it may be heard on each side of the sternum downward and frequently is heard well in the fourth intercostal space on the left side near the sternum.

This murmur, if faint and soft, may be easily missed. The patient should be instructed to exhale completely and the examiner should listen closely along each side of the sternum while the patient ceases to breathe. In most cases it is heard best while standing or sitting. Diastolic murmurs which are due to pulmonary disease are rare. If the leak at the aortic valve is slight, there will be no associated signs such as enlargement of the heart, changes in the blood pressure and Corrigan pulse. Occasionally in marked anemia or extremely high blood pressure there may be a stretching of the aortic ring and this murmur may be heard although no disease of the valve is present, but this is rare.

3. *Definite Thrill on Palpation.* Definite thrill on palpation usually goes with some well-marked murmurs. The first of these is a diastolic thrill at the apex in mitral stenosis; second, a definite systolic thrill over the aortic area transmitted upward to the neck in aortic stenosis, or a diastolic thrill in some cases of aortic regurgitation; third, congenital defects, which include thrill over the pulmonic area due to pulmonary stenosis or patent ductus arteriosis; fourth, thrill over the middle of the heart in septal defects.

4. *Gallop Rhythm.* We will not take time to discuss the theory of the mechanism of this sign. It consists of three distinct sounds and is not to be confused with splitting or reduplication of the sounds or with the normal third heart sound in young people. It is heard best at the apex, but may be heard over a wider area and at a rate of about 100 or slightly more. It is usually associated with other signs and symptoms of cardiac failure, but may be the only sign. In some cases of coronary occlusion where the symptoms are misleading and other physical signs are lacking, a gallop rhythm may point directly to the heart. It is frequent in cases of hypertensive heart disease and its appearance indicates failing myocardium. It may make its appearance some time before other signs of failure appear.

5. *Pulsus Alternans.* This type of pulse, occurring at a high rate of speed, such as occurs in paroxysmal tachycardia, has no significance. Occurring at a normal rate it means failing myocardium. Occurring in this latter condition it is usually associated with other striking evidence of heart disease, but not invariably so. It is also found in cases of coronary occlusion and has the same value as gallop rhythm. This sign is detected while taking blood pressure and is noted as follows: When the blood pressure sounds are heard, it is perceived that the rate of the sounds is only one-half the pulse rate. As pressure in the cuff falls several millimeters of mercury, possibly 5 or 10, the number of sounds heard is doubled.

6. *Pericardial Friction Rub.* A pericardial friction rub has great diagnostic value in some cases of acute rheumatic fever and may lead to a correct diagnosis in some cases of coronary occlusion, but may be heard in uremia or at the end in chronic nephritis.

7. *Definite Changes in the Electrocardiogram.* We will not go into the description of normal and abnormal curves; suffice it to say that the electrocardiogram at times gives the only evidence of heart disease. We will include under this heading the different types of heart block, auricular fibrillation and auricular flutter. These usually mean myocardial disease. These

disturbances of the heart beat can frequently be recognized clinically, but the electrocardiogram will have to be utilized in many cases for a correct diagnosis, especially in heart block.

In the above we have considered seven signs as the most reliable criteria for diagnosis of diseases of the heart. We will now mention one symptom. This is pain, which is usually substernal but may be in other parts of the chest or arms. The pain has the characteristic of being brought on by exercise or excitement, especially after meals, and is relieved by rest or nitroglycerine. This type of pain may occur in marked anemia without heart disease.

LESS RELIABLE SIGNS

We will now discuss for a moment some of the less reliable signs. We will mention first the systolic murmur. This is the sign which probably causes more mistakes than any other. We may state to begin with that a systolic murmur without any associated signs, such as thrills, diastolic murmurs or enlargement, has little or no diagnostic or prognostic significance unless very rough and loud; even with this we can not always be positive. They may mean changes which are congenital or acquired. Even though there is some defect, if the heart is normal in size the patient should not be frightened and his life made miserable because of it.

When a systolic murmur at the apex is found in young people with a recent history of some febrile condition, such as rheumatic fever, decision should be postponed and further observation requested. Be careful about making a positive diagnosis in this situation. Systolic murmurs at the apex in very large hearts are due to faulty closures of the mitral valves, associated with the enlargement itself and not due to disease of the valves.

A systolic murmur at the aortic area, unless rough and transmitted upward and associated with a thrill, as a rule should not be considered evidence of heart disease. The same may be said about murmurs over the pulmonic area; these pulmonic murmurs, however, are not likely to be transmitted upward even in the presence of disease.

We will mention two disorders of the heart beat. The first of these is premature contractions or extra-systoles. This irregularity taken alone is not a sign of heart disease. The second disorder is paroxysmal tachycardia. This condition is characterized by sudden onset, regular rhythm, and a rate of 180 to 200, and it stops as quickly as it starts. As a rule it does not mean heart disease, unless it arises in the ventricles, which is rare, and then it is recognized by the electrocardiogram.

There are a few corroborative signs. These are moist rales at the bases of the lungs, edema of the ankles at the end of the day, and enlargement of the liver. Further, one should remember that in elderly people with myocardial disease there may be no signs found in the heart, but the symptoms of heart failure may be relieved by digitalis, so in rare cases a therapeutic test is justifiable.

In closing I will say that the past and family history has its greatest value in determining the etiologic diagnosis. Symptoms have their greatest value in determining the functional condition of the heart and guide us in treatment.

DISCUSSION

Dr. Allan Eustis, (New Orleans): As one eminent internist once said, "The saving of a human life is far more important than the making of an accurate and irrefutable diagnosis". When Dr. Bamber speaks of mitral stenosis, valvular disease of the heart is meant. The heart is as strong as its muscle and while the diagnosis of the various types of valvular disease are of interest from a scientific standpoint the life of the patient will depend upon the function of his heart muscle. Contrary to what Dr. Jamison has just said about the diagnosis of myocardial efficiency, I am persuaded that this is a comparatively easy matter with the cardio-respiratory test of Frost. This test has been in use by the New England Life Insurance Company for nine years and an analysis of some six thousand risks upon which this test was carried out shows that the test is a definite guide as to the efficiency of the heart. I have been using the test for almost nine years routinely in my practice, and as I stated in discussing Dr. Knighton's paper, yesterday, I feel that it is as accurate in testing the myocardial efficiency as one could wish. "It is hard to teach old dogs new tricks", but I have attempted to interest Dr. Jamison, as well as many other medical friends, in the test. Until they have mastered the test I do not think they are justified in saying it is impossible to determine early myocardial decompensation.

Dr. John B. Elliott, (New Orleans): I have reviewed lately some of the records of my heart cases dating back over thirty years, and find many cases labeled "apical click." These cases

were frequently at first called mitral stenosis, but as time went by and the sounds became a little louder and more "clicky" with no other signs of stenosis—no thrill, no snappy first sound, no dyspnea, no cyanosis, etc., these diagnoses were changed to "apical click," and the patient and doctor relieved of any worry on the score of heart disease. These clicks are hard to explain, and I have held them to be remains of old pericardial adhesions occurring during measles, scarlet fever, rheumatic fever, etc., but I believe many other explanations have been given. The main point is to assure the patient that these conditions are not organic, and should not prevent one from getting life insurance, a point on which I have often been consulted.

BILATERAL LENTICULAR DEGENERATION WITH THE POSSIBILITY OF AN ELECTRICAL BURN ACTING AS AN ETIOLOGICAL FACTOR*

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In choosing the title for this paper, I purposely refrained from using the terms Wilson's disease, hepatolenticular degeneration or progressive lenticular degeneration for reasons that will be obvious in the case report which will follow.

Frerichs in 1854 was the first to describe the condition known today as Wilson's disease. He failed, however, to demonstrate the pathological changes in the corpora striata but did recognize the cirrhosis of the liver and discussed most of the clinical symptoms.

Gowers in 1888, under the title of tetanoid chorea, described the same condition. The German neurologists, Westphal, Strumpell and others used the term pseudosclerosis to describe a hodge podge of conditions resembling, and in some instances, no doubt, frank cases of progressive lenticular degeneration. S. A. K. Wilson, in July, 1911, at the University of Edinburgh, read his original article on progressive lenticular degeneration. He reviewed and collected from the literature, up to that date, twelve cases, and from his exhaustive investigation and personal observation of the six cases reported by him, he was able to prove pathologically and describe as a definite clinical entity progressive lenticular degeneration, characterized by hepatic cirrhosis and bilateral lenticular degeneration. Wilson's original article, today, still stands as the masterpiece of literature on this subject. Important facts set forth by him are:

(a) The disease is familial, probably hereditary but not congenital.

(b) It occurs, usually, in the young.

(c) It is essentially a disease of the extrapyramidal motor system.

(d) The part of the extrapyramidal motor system involved is confined to the corpora striata and is always bilateral. The putamen, the external capsule, the caudate nucleus and globus pallidus in the order named show the greatest pathological changes. The internal capsule is never damaged.

e) The liver always shows cirrhosis of the multi-lobular type.

(f) The disease is progressive, usually fatal within five years.

(g) It is probably of toxic origin, the toxin being produced in some area drained by the portal circulation.

(h) It occurs in both sexes about equally.

(i) Prior to the onset of the disease, the patients are, apparently, of normal, mental and physical development.

Clinically, there are two types of the disease: the acute or subacute and the chronic. The former begins with a febrile reaction, occurs in young adults, is always familial and very much more progressive. The chronic type, without cirrhosis, is slowly progressive; may last for many years.

The symptoms may be grouped under:

1. General.
2. Psychic.
3. Neurological.

The general symptoms have to do with nutrition of the patient. At first the nutrition is good; color good, but, as the disease progresses, there is a constant loss of weight, emaciation and general weakness with a terminal anemia and cachexia. The skin shows nothing abnormal except the wrinkling concomitant with emaciation. The sexual functions are not in-

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terfered with. In the female the menses cease after the onset of the disease. The liver is cirrhosed. The sclero-corneal junction, in many cases, shows rings of dark greenish yellow pigmentation.

The psychic symptoms are, at first, nil, but the patients later on show varying degrees of mental changes ranging from irritableness and depression to more profound changes accompanied by delusions, hallucinations etc., with terminal stages of dementia. The emotions are easily excited and the patients provoked to laughter or crying.

The neurological symptoms vary, depending upon the amount of destruction present in the corpora striata. General muscular weakness of the subjective type is always present but never a true paresis or paralysis. The other neuromuscular signs are of a hyperkinetic, hypertonic nature.

Tremors are recorded in nearly all cases, usually as the initial symptom. They are constant, bilateral, symmetrical, rhythmical but not always uniform. It is a true tremor with alternate contractions of a given muscular group and its antagonists, which vary in rate from two to four per second. They are increased by voluntary movement, by excitement or if attention of the patient is focused on them; they decrease during rest and cease during sleep. The excursions of the tremors vary in amplitude from a fine tremor to those of a very wide nature. These tremors are more evident in the peripheral than in the proximal portions of the extremities, and become worse as the disease progresses.

Hypertonicity with spasticity and rigidity is always a prominent symptom, and, ultimately, becomes extreme. The muscles of the trunk become rigid; those of the neck become fixed. The face becomes expressionless, masklike, grinning or assumes the open-mouthed spasticity.

As a result of the rigidity, dysarthria or even amarthria may be present. The speech is slurring; not scanning in type. Dysphagia occurs as the muscles of the throat become involved. It is singular that none of the extra-ocular muscles become affected. The sphincters remain intact. The stage of contractures follow the rigidity, and, as the flexor muscles predominate, the resulting deformities are of the flexor type. Paradoxical as it may seem, in spite of the tremors, rigidity and contractures, a certain amount of voluntary muscular action and power remain. The gait varies, in the beginning it is usually strutting, proudlike, on the ball of the foot something like a marionette. The tongue can be protruded but only slowly. The superficial and deep reflexes remain present but may be hard to elicit on acount of the rigidity and contractures. Pathological reflexes are absent. Sensation is normal. The nerves of the special senses: taste, hearing and sight remain intact. Fundi show no changes.

CASE REPORT

Mrs. W. L. H., white female, aged 38 years. Housewife and fisher-woman. Complaint: About two months previously, during a rain storm when the houseboat was tied up on the banks of Red River, she went out to gather in the washing from a barb-wire fence. She was struck by lightning; knocked unconscious for about thirty minutes and remained dazed for almost two days. Was found by husband shortly after accident and carried to the boat. Husband says he heard her scream. The palms of both hands and the soles of both feet were badly burned. She was bare-footed at the time. About three weeks later she noticed that both hands would tremble and shake; especially when she tried to repair the nets or fix fishing lines; became less when she was quiet. She has gradually become weak, and, for the last few days, noticed some unsteadiness in walking. She is irritable and feels depressed at times. Family history was apparently irrelevant.

Patient was youngest child. Normal birth.

Early Development: Sat up, walked and talked about usual age.

Menstrual History: Began at age of 13 years; irregular for first year; very regular since then, normal flow, 4 days duration, some pain and backache first day. Has not menstruated since accident.

School History: Went through fifth grade, had no trouble in school.

Social History: Married 20 years, never pregnant, husband living and well.

Venereal History: Negative for both self and husband.

Sexual History: Normal.

Previous illnesses: Measles, whooping cough, chickenpox when a child, influenza 1918, pneumonia 1924.

Occupation: Lives out door life; fishing up and down rivers, enjoys this type of life, does all housework and washing. Not socially inclined.

Habits: Drinks a little at times. Smokes a pipe now and then; never constipated until after accident.

General Examination: Well nourished white female, age about 40 years, suntanned, weighing about 160 pounds. Attitude: Patient sits bent forward in a tense position, with head cocked backwards and slightly to left. Cardiovascular System: Heart normal in size, no murmurs, pulse rate 80 per minute, blood pressure 140/88. Respiratory System: Negative. Genito-urinary System: Negative. Sinuses: Apparently negative. Gastro-intestinal System: Right upper 2nd molar extracted, some pyorrhea. No tenderness over abdomen, spleen not enlarged, liver not palpable. Skin: Two linear scars over palms and fingers of both hands; also scarring of soles of both feet, results of burn. Mental Examination: Nothing abnormal except patient is irritable and depressed. Neurological Examination: Speech: A little slow; at times jerky. Tremors: Slow tremor of eyelids both sides; also tongue, slow rhythmical, symmetrical, bilateral tremor both hands; made worse by attempting to pick up pin or when patient talks about it; diminished when at rest. Coordination: In finger to finger and finger to nose test, some slight dysmetria. Muscle tone: May be some slight rigidity. Muscles of face appear a little tense. Muscle power: Good, although patient complains of weakness. Deep Reflexes: Normal. Superficial Reflexes: Present. Pathological Reflexes: Absent. Sensation: Normal. Pupils: Equal, regular outline, react to light and accommodation. Consensual Reflexes: Present Fundi: Normal. Gait: A little unsteady with eyes open, much more so with eyes closed.

Laboratory Findings: Blood: Negative. Spinal Fluid: Negative. Diagnosis: Probably anxiety neuroses with some neuronitis following electrical burn. Patient requested to report back in six months.

Patient seen again in July, 1927. At this time patient had lost about fifteen pounds. Tremors had increased, rigidity more marked, gait more uncertain, face becoming mask like, speech slightly slurred. At sclero-corneal junction definite rings of greenish pigmentation; liver not enlarged. Patient still able to be about. Diagnosis: Extra-pyramidal disease.

Patient seen again in February, 1929. Patient weighed about 130 pounds. Facial muscles more tense; face set in a spastic smile. Tremors present in both upper and lower extremities, very marked, increased upon attention and upon voluntary effort. Gait very uncertain; patient used walking cane and crutch. Speech indistinct, slurring. Brownish green rings of pigmentation at sclero corneal junction. Liver not palpable. Laboratory findings: Blood, negative. Spinal fluid, negative. Diagnosis: Bilateral lenticular degeneration.

Patient seen again in 1932. Weighed about 120 pounds, but otherwise no worse, liver not palpable.

Patient seen June, 1933. Weighed about 110 pounds. Tremors more marked and involved virtually all muscles of body. Rigidity greatly increased with head drawn back, some contractions of the flexor type involving both upper and lower extremities; hardly able to protrude tongue. Complains of difficulty in swallowing. Speech hardly understandable. Husband said at times she was unable to talk; could only mumble. Patient still had some voluntary motor power; could stand up or walk only with much help due to contractures and spasticity. Mentally patient showed confusion with transient delusions and hallucinations.

Although the liver was not palpable, the following laboratory findings showed involvement: Van den Bergh test for bilirubin showed an immediate direct positive reaction. The blood serum upon addition of the diazo reagent began to turn red within 15 seconds; became very red within 45 seconds. Icterus index obtained on fasting blood was 10. Spinal fluid: Negative. Red blood cells 3,212,000. Hemoglobin 55 per cent. White blood cells: 8,700. Polys 68, small lymphocytes 24, large lymphocytes 6, eosinophils 1, basophils 1.

SUMMARY

This case is unusual in that it began at the age of 38 years. It was not familial. The patient is still living after seven years. No gross pathology of the liver is present. It began within six weeks following a stroke by lightning. It is interesting to speculate on the role lightning played as a causative factor.

DISCUSSION

Dr. M. S. Freiman, (Alexandria): The case presented by Dr. Young was a very interesting one and presents a rather rare phenomenon, rare because cases of brain damage due to electrical shock usually do not live long enough to present any sequelae whatever. Stanley Cobb and his coworkers in Boston have done considerable experimental work investigating the effects of electrical shock on the brains of laboratory animals. They found as a result of passing sublethal currents through the brains of various animals, widespread hemorrhages through the nervous system, together with necrosis of various groups of nerve cells, the amount of damage done and its location depending on the nature of the current, its strength, and the path through which it was directed. In the case under discussion, from the clinical symptoms, I do not believe that there can be any doubt but what there has resulted a bilateral degeneration of the large cells of the lenticular nucleus. The extra-pyramidal system is phylogenetically more recent than the pyramidal system and seems to be more easily injured by noxious agents of all

types; for example, it is very common to have a condition of Parkinsonism follow heatstroke, carbon monoxide poisoning and various intoxications with a heavy metal, such as lead, manganese, etc., while there is no evidence to point to damage to any other structures of the central nervous system.

There is one other point of interest that I would like to mention and that is the long latent period between the time of injury or destruction of the lenticular cells and the development of clinical signs of damage. Unquestionably, in the case such as was presented here, the damage was immediate at the time of the passage of the electrical current through the brain tissue, and yet signs of this damage did not make themselves manifest until a much later period. The reason for this latency that is seen in all striate syndromes has not as yet been satisfactorily explained.

THE MANAGEMENT OF BLADDER TUMORS*

MAX M. GREEN, M. D.
NEW ORLEANS

Bladder neoplasms have been much discussed in the last few years, but in spite of this no entirely satisfactory method of handling them has been perfected.

The early diagnosis of cancer of the bladder is very important, but the difficulty in making such an early diagnosis lies not so much in the lack of necessary instruments, or in the improperly trained operator, as in the fact that the condition may, and often does, give very few or no symptoms until it has reached such a point that its complete or permanent removal is unsatisfactory, or practically impossible. Such a situation may be the case when the patient first presents himself for examination.

Since the symptoms, although most important, are often not very plain to the patient or to his doctor, it is very important that we attempt in every way possible to bring these patients to an early urological examination. A review of the more important clinical symptoms of bladder tumors is then in order.

The common symptoms of bladder tumors are hematuria, pain and dysuria.

Hematuria may or may not be painful, depending upon the location of the tumor or the presence of clots; these clots often interfering with urination, causing pain. Although hematuria is considered most important of all urinary symptoms, it is also the most neglected. It is logical to think that if we hope for a cure of bladder tumors, we must think of such neoplasms when we have blood in the urine. We should then, of course, try to find the source of this bleeding. It is often sad to note that a patient has had hematuria for two or three years and nothing has been done to clarify the situation. Hematuria is Nature's warning and is a signal to us to exert every effort toward finding the cause.

Helpful as is the careful consideration of symptoms, the diagnosis of early carcinoma of the bladder rests most securely in the use of the cystoscope. From the practitioner's point of view the important thing is to try not to diagnose a malignant condition of the bladder (should he make the diagnosis of frank carcinoma, the condition will probably be found to be inoperable), but to submit every case of unexplained hematuria and chronic cystitis to early cystoscopy. Only by this means can a sensible early diagnosis of malignant disease of the bladder be made.

In hematuria of uncertain origin it is most desirable that the cystoscopy be performed during the occurrence of the bleeding in order that an uniliteral renal hematuria may be referred to its correct side. In hematuria of known bladder origin it is best to cystoscope the patient during a period of freedom from bleeding, if such can be done without undue delay.

Pain depends on (1) the location of the growth; (2) how badly the bladder wall has been infiltrated by the growth, and (3) the effect upon the surrounding tissue. Pain is always prominently present in the fast growing sessile tumors appearing at the base, or in the region of the trigone of the bladder, as they may interfere with the proper contraction of the bladder.

Cystitis complicates the majority of cases of carcinoma, being the usual cause of frequency of urination. According to Thompson Walker, 40 per cent of the malignant growths show cystitis as the first sign. Pain is a common symptom of carcinoma and may be due to cystitis, clot retention or passage of clots or pieces

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of growth, involvement of nerves by extension, or to uretral obstruction.

In a series of 150 cases, 136 males and 14 females, Smith and Mintz found as their chief presenting symptom hematuria in 125 cases, dysuria was mentioned as a symptom in 26 cases (7 of these also had hematuria), while 18 had dysuria without any bleeding. Pain was a symptom in only 6, occurring in various regions of the abdomen; in one case in the right lower leg. This case showed a metastasis in the upper end of the right femur and in the right ileum. In 12 cases the symptoms were of one month, or less, duration. In only 40 per cent had the symptoms existed for six months or less. Twenty-four per cent showed symptoms for a period of six to twelve months, and 18 per cent for one or two years.

The successful handling of tumors of the bladder has been greatly improved by simplified classification. Broders has shown that 95 per cent of bladder tumors are epitheliomas and can be divided according to changes in the cells into four groups, depending upon the degree of malignancy observable by the tendency of the cell to differentiate. He stated: "It is very important to know the type of carcinoma in a given case. No one would think of putting the ordinary garter snake and the death-dealing cobra in the same classification, but they are both snakes. No one would think of putting the basal-cell epithelioma and the highly malignant melanotic epithelioma in the same classification, but they are both carcinomas. A neoplasm can accomplish only what its cells can accomplish; if its cells are active, it is active. A neoplasm may be of papillary form and of a high degree of malignancy. It may be flat or ulcerated and of a high degree of malignancy, or it may be flat and ulcerated and of a low degree of malignancy." Carcinoma graded 1 and 2 comprise the least malignant tumors, and those graded 3 and 4 the most malignant. Knowing the degree of malignancy of a tumor, it becomes possible to predict with considerable accuracy the possibility of cure provided the size and situation of the tumor are also carefully considered.

Frater, in a careful study of 129 cases at the Mayo Clinic, in which the grade of malignancy had been reported and the subsequent microscopic examinations of the resected tumors made, found that in each case the grade of malignancy determined by the examination of the cystoscopic specimen agreed with that of the resected tumor. In a study of 64 cases, he found that the degree of malignancy does not vary in different areas of the same tumor. In a review of 63 cases examined at different periods, mostly recurrences, there was evidence of increase in malignancy in only two.

With these facts established, the performing of the biopsy becomes a very necessary procedure before the institution of treatment. Some investigators say that the taking of specimens from tumors will hasten spread of the tumors, but the records of the Mayo Clinic fail to substantiate this claim.

Caylor states that the papillomas of the urinary bladder should not be considered as benign tumors, but as low-grade papillary epitheliomas, as they bear the same relationship to epitheliomas of the bladder as grade 1 squamous cell epitheliomas of the lip bear to the more malignant grades of epitheliomas of this organ.

Tumors can be roughly divided regarding their gross appearances into papilloma, papillary carcinoma and infiltrating growths.

The cystoscopic picture of the benign papilloma, which is regarded as potentially malignant, has been described by Galbraith as resembling a piece of semi-translucent sea-weed attached to the bladder mucosa by a slender stalk, the fronds are long and free. It is generally located close to the ureteric orifice, usually just above or external to it. In Fifield's series of 151 papillomas, 67 per cent were so located and 28 per cent were on the posterior wall. It is suggested by some that these papillomas may be derived from the kidney, but McDonald says that implantation growths of the bladder, secondary to renal papilloma, are always malignant.

One of the most characteristic features of papilloma of the bladder is a tendency to disseminate over the bladder wall or recur after removal. In the early diagnosis of papilloma of the bladder, it is always very important on discovering one papilloma to make a thorough study of the bladder in search of others. The most constant symptom is painless intermittent profuse hematuria unassociated with other uri-

nary symptoms. Two or three years is the usual duration of their history.

On cystoscopy the intramural type of growth appears as a carcinomatous ulcer, or as an irregular nodularity of the mucosa. The projecting papillary type includes the malignant papilloma, the nodular sessile form, and the diffuse shaggy variety, the papillary carcinoma being sort of a pathological link between the papilloma and the malignant carcinoma.

In certain cases in which satisfactory cystoscopy cannot be done on account of persistent bleeding, or improper cooperation from the patient, a cystogram often proves very helpful. Nichols advocates fluoroscopic cystography, using a small amount of solution in the bladder, he feeling that if the bladder is distended the filling defect cannot be seen. Cystograms are also of great value in the diagnosis of the infiltrating type of new growths, the type which will present a very small growth when viewed through the cystoscope. In making a cystogram at Charity Hospital, we usually employ 5 per cent sodium iodide, filling the bladder well and taking an anterior-posterior and two oblique pictures. Cystograms would be of very little value in the diagnosis of small growths.

Since it is rather hard to tell the degree of malignancy of a bladder tumor through the cystoscope, it is advisable that we have a biopsy. There is no way except by careful microscopic examination of the specimen removed from the tumor that we can best advise our patient as to the most rational form of treatment. In the large, flat growths where open operation is necessary, a biopsy is not quite so important, unless the surgeon wants to know the particular type of growth with which he is dealing before operation is attempted. After a biopsy is done from these large growths, specimens should be removed from different portions of the growth, as some think these often vary in the degree of malignancy in different parts of the growth.

I wish to present four cases having carcinoma of the bladder, giving a brief history of each case and the treatment used.

CASE REPORTS

Case 1. J. A., white male, aged 44 years. Came to the office on July 21, 1933, complaining of blood in the urine and painful urination for thirteen months.

F. H. Irrelevant.

P. H. Hemorrhoid operation two years ago.

V. H. Wasserman negative. No venereal diseases.

P. I. Began thirteen months ago with fever at night, together with frequency, dysuria and hematuria. Fever cleared up, but his bladder continued to bother him. Was cystoscoped and told he had kidney trouble. Later had a prostatic massage. Another doctor told him he thought he had trouble with his prostate. He found that he tired easily. Examination revealed a well nourished, middle aged man. Reflexes normal. Urine: Cloudy and blood tinged. Prostate small, rather hard. Secretion was negative. Cystoscopy showed pedunculated tumor mass in the region of the left ureteral orifice, obstructing the orifice, measuring 1 inch in diameter, pedicle was small. Three small pieces of tumor removed for a section. The tumor was fulgurated. Specimen of tissue graded Type III papillary carcinoma. On July 28, 1933 fulguration done and again on August 2, 1933 and August 9, 1933. Tumor markedly reduced in size. Patient did fairly well the next two or three weeks, complaining at times of gas and a few pains in the abdomen. On October 3, 1933 it was felt that the patient had some obstruction to the left kidney as he was having considerable pain in his left side. The left ureter was catheterized and 60 cc. of cloudy urine removed. There was very little evidence of tumor left. On November 3, 1933, tumor was not visible. Thirty cubic centimeters stasis in left kidney. November 17, 1933, 15 cc. On February 3, 1934 patient was scoped and inspection of the bladder showed a small tumor about 3mm. in diameter, which was fulgurated. On March 3, 1934 patient had been cystoscoped since last fulguration and again that day. No tumor seen. Left kidney showed 15 cc. stasis.

Case 2. J. N., white male, aged 52 years. Admitted on May 21, 1932, complaining of blood in the urine.

F. H. Married and two children.

P. H. Usual childhood diseases.

V. H. Negative.

P. I. Patient stated he had had blood in the urine for ten months off and on, and continuously for the last ten weeks. Patient seen by me two weeks ago and fulgurated, and biopsy taken. Examination revealed well developed male. Local examination showed an enlarged prostate. Section of biopsy specimen showed papillary carcinoma Grade I. This patient was cystoscoped on April 15, 1932 and a pedunculated growth found, located just above the right ureteral orifice, measuring about 3 cm. The tumor was fulgurated at the same sitting. Was observed again four weeks later and on second examination it was thought, from the size of the tumor, advisable to do a suprapubic

fulguration. On May 25, 1932, the bladder was opened under spinal anesthesia and a mass 4x3 cm. found. The top of the tumor was clipped off and the pedicle fulgurated. On June 16, 1932, patient developed an abscess on the arm. On June 20, 1932, developed chills and temperature 106°F. This septic condition continued. Was cystoscoped on June 22, 1932, site of tumor healing. On June 24, 1932, developed a scrotal abscess. Blood count on June 22, 1932 showed 14,000 leukocytes, 9 small lymphocytes, 2 large lymphocytes, 89 neutrophils. Patient died June 27, 1932. Diagnosis: septicemia and scrotal abscess.

Case 3. L. B., white male, aged 48 years. Admitted on June 24, 1933, in comatose condition, having convulsions. A satisfactory history was not obtainable. Examination revealed a well developed man, very ill. General examination revealed little of importance except markedly distended bladder. Wasserman strongly positive. Cystoscopy revealed a small tumor in the left of the right ureteral orifice. Specimen was taken. This specimen graded No. 1. The tumor was not fulgurated at this time as patient had a rather acute bladder. On August 18, 1933, tumor was fulgurated. Patient discharged on August 21, 1933. On October 31, 1933, patient readmitted, stating he had been bleeding for two weeks and complained of a dull pain over the bladder. November 9, 1933 cystoscopy done and a pedunculated papillomatous growth found just above the right ureteral orifice. It did not seem to be infiltrating in character. A biopsy was done. On November 11, 1933, a suprapubic cystotomy was done. The tumor mass cut away with the cutting current and the base fulgurated. On December 12, 1933, cystoscopy revealed a normal bladder. The only evidence of the old tumor was a white scar. Results excellent.

Case 4. W. A., colored male, aged 65 years. Admitted June 4, 1932, complaining of burning on urination and shortness of breath.

F. H. & S. H. Irrelevant.

P. H. Health always good.

Examination: Poorly nourished negro man. General examination otherwise negative. Rectal examination: prostate small. June 6, 1932, cystoscopy revealed a tumor on the left lateral wall and part of the fundus of the bladder, measuring about 6x5 cm. The pedicle was rather broad. Biopsy revealed adeno-carcinoma. It was not graded. June 8, 1932, Wasserman negative. June 14, 1932, a subrapubic cystotomy was done. The tumor mass was resected by cutting about ¼ inch well outside the growth. The tumor did not seem to infiltrate the bladder wall and a very satisfactory removal was done. The opening in the bladder was closed with chromic catgut No. 2, leaving a Pezzar catheter in the bladder. Tumor graded III. Patient discharged on July 22, 1932, bladder completely healed. Patient stated he felt well. On July 25, 1933 patient readmitted complaining of slight frequency of urination, but said he was really suffering more with a bad foot. While in the ward patient developed suprapubic sinus, but otherwise felt good. Patient discharged on September 13, 1933. On November 14, 1933., patient readmitted and died on December 17, 1933, with influenza, broncho-pneumonia and erysipelas of the face.

In the treatment of bladder tumors there are a number of methods used today. Just what method of treatment is used in a given case depends on whether infiltration is present or not and upon the individual operator. If we could get our cases early, we should get fairly good results, but, as you know, we frequently see our patients when they have had hematuria off and on for many months, or possibly years.

It is generally agreed that the papillomas, or the tumors of low-grade malignancy, will respond to the bipolar coagulating high frequency current rather satisfactorily. This may be done through a cystoscope.

Bumpus says that the Type I tumor of considerable size may be destroyed in this way, applying also to Grade II if its size is not more than 1 cm. in diameter. If of larger size, he advocates open electro-coagulation or resection, if possible.

In the papillary carcinoma, or infiltrating growth, we find much disagreement as to the best way to handle these. Radium, radium emanation seeds, electrocoagulation, actual cautery, radical surgery and combinations of these have their advocates. Young believes that 62 per cent of papillary carcinomas may be cured by electrocoagulation followed by radium through the cystoscope. These methods should be tried, if possible, before opening the bladder, because when successful the operative morbidity and mortality is much better. If such treatment seems unlikely to achieve the desired result, because of extensive nature of the disease, the bladder should be opened suprapubically and an attack made under direct vision. You may find that what appears to be a small growth through the cystoscope is only the apex of an extensive infiltrating neoplasm.

With the bladder open, some surgeons will resect the tumor where it can be done completely with a good margin or healthy bladder wall. Hunt holds that most tumors of the dome, lateral or posterior wall of the bladder are resectable and this is the method of choice.

In tumors grading II, III and IV, Bumpus believes that radium seeds should be used, following transurethral electrocoagulation if growth is so situated that resection is dangerous and complete destruction by transurethral diathermy inadvisable.

Barringer has developed a technic of suprapubic application of radon seeds to bladder tumors which has been rather successful. He uses this in dealing with tumors of the base or the trigone of the bladder. His method consists in applying a series of radium bearing needles, usually 1 to 1-1/2 millicuries each, placed about a centimeter apart into the base of the growth, the body of the growth having been previously removed with a cautery.

Barringer in a series of 98 cases diagnosed on pathological observation, using radium in the form of emanation seeds, reports 43 per cent three year cures for papillary carcinoma, and 29.7 per cent in infiltrating carcinoma. There are two points about his technic which must be considered—first, that he removes the projecting portion of the tumor with a cautery, and secondly, he includes among the papillary carcinoma, those papillomas which show some atypical cells. Some think that the actual cautery alone will cure some cases of papillary and infiltrating carcinoma, beleiving that it will cure about as many cases of papilloma as electrocoagulation.

Keyes thinks that thorough fulguration is sufficient for small papillary carcinomas without infiltration of the base, but if there is any doubt as to the malignant involvement of the base, radium should be used. He is confident that suprapubic radium implantation is the simplest and safest operation for large or infiltrating growths.

Harrah believes that almost all bladder tumors, whether benign or malignant, should be treated with a high-frequency current, and that malignant tumors should be further treated with gold radon implants. Certain growths in the fundus or lateral portion of the bladder, he believes in the deeper portion of the bladder involving the trigone and floor should be handled by fulguration, followed by implantation of radium emanations. In resecting bladder growths, he feels that the risk of implanting new tumors is very great.

There are certain cases of bladder tumors which are situated in the base of the bladder and are so extensive that none of the usual methods seem applicable. These cases can sometimes be benefited by ureteral transplantation according to the technic of Coffey. Cystectomy may be done in certain cases but is considered a very difficult procedure, carrying a very high mortality.

Dr. Jorda Kahle has done eleven cases of ureteral transplantation with only two immediate deaths, one from pulmonary embolus ten days after operation and one from acute dilatation of the stomach and uremia. Dr. Kahle seems to think there is a very definite place for ureteral transplantation.

Smith and Mintz, in comparing the results of resection, electrocoagulation and radium, find the mortality lowest in electrocoagulation 26 per cent, 32 per cent in resection and 41 per cent in radium implantation. The end results of the three methods were about the same.

SUMMARY

An urgent plea is made to members of the medical profession to regard very seriously symptoms referable to the bladder, as hematuria, frequency or urgency. All such cases should be cystoscoped as early as possible in order that an accurate diagnosis may be made and proper treatment outlined. Four cases are presented briefly, including the method of treatment. The treatment of tumors of the bladder is touched on in a general way, citing some of the methods used today.

REFERENCES

1. E. S. Judd and J. R. Phillips: Bladder cancer—curability. Proceed. Staff Meeting, Mayo Clinic, 8:413-416, 1933.
2. E. Beer: Diagnosis and treatment. S. Clinic N. Amer., 13:255-269, 1933.
3. A. E. Roche: Early diagnosis of malignant disease of the bladder. Practitioner, 130:206-216, 1933.
4. G. G. Smith and E. R. Mintz: Bladder tumor—observation on 150 cases. Am. J. Surg., 20:54-63, 1933.
5. B. S. Barringer: Radium implantation vs. total cystectomy. S. Clinic N. Amer., 13:401-405, 1933.
6. D. M. Davis: Radium treatment of carcinoma of

the prostrate and bladder. S. Western Med., 17:91-94, 1933.

7. J. R. Bate: Treatment of bladder neoplasms. Kentucky Med. J., 30:377-379, 1932.

8. B. S. Barringer: Technic of suprapubic application of radon seeds in bladder carcinoma. S. G. & O., 55:487-489, 1932.

9. F. H. Redevill: Methods of treatment of bladder tumors. Urol. & Cut. Review, 36:145-151, 1932.

10. F. W. Harrah: The management of bladder tumors. Ohio State Med. J., 28:175-179, 1932.

11. W. Haines: Modern conception of therapy. Urol. & Cut. Review, 36:178-180, 1932.

12. H. D. Taylor: Pathology with special reference to grading of epithiliomas. Tr. Sect. Urol. J. A. M. A., 199-211, 1930, J. A. M. A., 95:1736-1740, 1930.

13. J. S. Eisenstaedt and T. G. McDougal: Primary cancer of prostate manifesting itself as tumor of bladder. S. Clin. N. Am., 11:195-197, 1931.

14. B. G. Barringer: Radium treatment of cancer of the bladder. Tr. Sect. Urol., J. A. M. A., 95:1734-1736, 1930.

15. H. L. Kretschmer: Treatment of carcinoma of bladder by surgical diathermy, 109 unselected cases. Tr. Sect. Urol., J. A. M. A., 95:212-218, 1930.

16. H. Wade: Treatment of malignant tumors of the urinary bladder. S. G. & O., 52:312-323, 1931.

17. P. W. Aschner: Clinical application of tumor pathology (Biopsy). S. G. & O., 52:979-1000, 1931.

18. H. S. Jeck: Effect of radium on papillary epithilioma of the bladder as shown by autopsy specimen. Tr. Am. A. Genito-Urinary Surg., 22:339-343, 1929.

19. James R. Stites: Diagnosis of early bladder neoplasms. Kentucky Med. J., 30:375-377, 1932.

20. W. E. Lower: Clinical aspects of genito-urinary tumors, Radiology, 15:544-547, 1930.

21. Bumpus, Crenshaw and Clark: Minor Surgery of Urinary Tract, 1932.

DISCUSSION

Dr. Joseph A. Danna, (New Orleans): I should like to discuss this subject from the standpoint of one doing a general surgical practice. The great majority of the cases of carcinoma of the bladder that I have seen have been so far advanced that they were beyond surgical or other relief. I should like for this reason to emphasize the fact that if we are to see these cases early the family physician should get in the habit of referring patients with genito-urinary symptoms to the specialist before the patient gets into such a state that the diagnosis of carcinoma of the bladder can readily be made. If this is done, many more cases will be diagnosed early and cured.

ACUTE SUPPURATIVE ARTHRITIS

J. ROSS VEAL, M.D.†

NEW ORLEANS.

Although there is a rather general tendency to regard acute suppurative arthritis as a relatively unimportant disease, such an assumption is entirely incorrect. It is true that it is a sequel of acute infectious arthritis in only a small percentage of cases, but against that relatively small incidence must be set a mortality that is shockingly high and end-results that are shockingly bad, chiefly because the diagnosis is not usually made until the disease is very far advanced.

Since the pathology of suppurative arthritis is clearly understood, it seems rather inexplicable that such a state of affairs should exist. The disease begins, as Hey Groves points out in his excellent outline, as an acute inflammation of the synovial membrane of the joint, the surface of which is eventually replaced, after the destruction of the endothelium and then the deeper layers, by granulation tissue. All of the ligaments become softened by inflammatory infiltration; those which are surrounded by synovial membrane are digested by the proteolytic action of leukocytes and bacteria and soon disappear, the others stretch or are ulcerated through. The cartilage ultimately is almost entirely replaced by granulation tissue which springs from the bone beneath or from the zone of granulations which have replaced the synovial membrane. The denuded articular surfaces of the bone exhibit an acute osteitis and the bony tissues eventually exhibit osteoporosis and caries, with later areas of necrosis, which does not, however, extend to the periosteum because of its independent blood supply. The joint cavity, which is first filled with turbid serum, then with pus and flakes or necrosed cartilage, is later lined with granulating surfaces which replace the destroyed synovial membrane and cartilage. Still later these granulations coalesce and become organized into dense fibrous adhesions.

Obviously any disease whose local pathology is so extensive cannot fail to produce a constitutional reaction of considerable severity, and, if it is permitted to continue without interference cannot fail to produce a high degree of ultimate disability. For that reason, and because within recent years there has been very little written on the subject, it has seemed to us worth while to study a series of cases of acute suppurative arthritis from the records of Charity Hospital in New Orleans, with the idea of determining why present methods of treatment are so unsatisfactory from the standpoint of

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mortality and immediate results. During the ten-year period ending in December, 1933, we have been able to collect 68 cases, exclusive of cases of gonorrheal arthritis or cases in which the involvement of the joint was the result of an adjacent osteomyelitis, and the fact that in this series the mortality was 12 cases, 17.6 per cent, seems to be, aside from any other consideration, ample warrant for such a study.

Certain general facts may be briefly dismissed. Suppurative arthritis, like acute osteomyelitis, is predominantly a disease of the earlier years of life, so that it is not surprising to find the highest incidence between 11 and 20 years of age, and almost three-quarters of the patients under 30 years. Practically the same proportion of cases occurred in males, and almost two-thirds occurred in the colored race, a fact which, as we shall point out later, offers at least a partial explanation of the very high mortality.

In striking contrast to other forms of arthritis the large joints were chiefly involved, the knee joint being affected in more than two-thirds of the cases. Only 31 cultures were positive, these figures being in line with those from other clinics; 17 were staphylococcus, 10 streptococcus, and 4 a combination of the two organisms.

Dogmatic statements as to the etiology of acute suppurative arthritis usually appear in most textbook discussions of the subject, and it is undoubtedly true that the responsible pyogenic bacteria may be introduced from infected foci elsewhere in the body, from the extension of adjacent infections, by means of external trauma, or as the residue of measles or scarlet fever. But every reported series proves, as does this one, that it is impossible in many cases to determine how or where the disease originated. In this series the etiologic factor is not apparent in almost half the cases; there was no history of a preceding infectious process, no objective or subjective evidence of trauma. The vague etiology, we might add, does much to confuse the picture and delay the diagnosis unless the physician always bears in mind how frequently the disease can begin spontaneously.

In 26 cases in this series there was a history of trauma, including contusions in 16 cases, lacerations with infections in 6, puncture wounds in 3, and a gunshot wound in 1. The small number of puncture and gunshot wounds supports the view of most authorities that in civil practice these particular causes are not very important, though when they are present, as in any condition in which there is a break in the skin over the joint, the entrance of infection is easily explained. The explanation is not so clear, however, in contusions, in which the skin is not broken and in which the infection sometimes is not apparent until several weeks after the original injury. The most reasonable explanation is that the trauma to the joint creates a *locus minoris resistentiae*, and that the organisms resident in the blood stream at all times sometimes become active in it. Trauma was a factor in only 5 cases below the age of 15 years, but was an increasingly frequent cause after that age. It is frequently slight, and careful investigation on this point is always necessary when the diagnosis of suppurative arthritis is in question.

In the remaining 10 cases in which the primary focus could be determined, the causes included abscesses and boils, infected burns, staphylococcal pneumonia, streptococcal sore throat, acute torticollis, acute tonsillitis, osteomyelitis in a remote bone, and the postoperative infection of a popliteal aneurysm.

Whether or not a primary focus can be determined, the train of initial symptoms is usually much the same. The condition practically always begins with a sudden stabbing pain in the joint, which frequently wakes the patient from sleep, which is increased by motion or by weight-bearing, and which is accompanied by fever from 99° to 104°F. and sometimes, as in 1 case in this series, by a chill. It is a circumstance worth noting that in 8 of the 32 cases in this series in which no primary focus could be determined the patient exhibited the symptom complex just described referable to one joint, with apparently complete subsidence, some days or weeks before the trouble recurred in another joint and went on to suppuration. In 2 cases there was a history of repeated attacks of polyarticular symptoms before suppuration finally occurred.

The physical findings are always quite typical. There is local swelling, or, if there has been a previous injury, increased local swelling,

the affected area is reddened, and tenderness is always noted when the joint is moved or palpated. Fluid rapidly accumulates, with distention and all the characteristic signs of an effusion. The patient involuntarily assumes the position of partial flexion which causes the least pressure on the joint capsule. Thus, when the hip is involved, there is flexion of the thigh on the trunk. The pain is markedly increased by any attempt at extension, in which respect suppurative arthritis is in decided contrast to osteomyelitis; in the latter condition the pathologic process is in the shaft of the bone rather than in the joint and cautious movement is therefore not attended with such discomfort.

The signs and symptoms we have just outlined are fairly characteristic and furnish the basis for at least a presumptive diagnosis, the confirmation of which is possible by aspiration, which should be repeated if the tap is dry and if the diagnosis does not promptly become apparent. Aspiration is a particularly helpful diagnostic procedure because pus is usually present in this disease very early; in one case in this series 50 c.c. was evacuated within three days after the onset of symptoms, and in 8 others it was present in equally large or in larger amounts within a week. It seems scarcely necessary to add that helpful as aspiration is, it becomes a very dangerous procedure unless it is done under the most careful aseptic precautions and with full realization that the cavity of a joint is a *noli me tangere*.

The roentgenogram, as in early osteomyelitis, is of very little value as a diagnostic measure until some destruction of the lining of the joint has occurred. It is true that it does demonstrate fluid, but that, except in small quantities in the deeper joints, can usually be made out by physical examination. In this particular series destructive changes in the joint were evidenced 22 times when the first roentgenogram was taken, which proves the advanced stage of disease in which many patients entered and which offers, again, some explanation of the bad results of treatment. It cannot be too strongly emphasized that if one waits for a roentgenological diagnosis one must wait, also, for signs of destruction within the joint, the occurrence of which means that the optimum time for intervention has passed and that the patient's life and his future function are both in jeopardy. The diagnosis of suppurative arthritis is not a difficult one to make if the history and physical findings, which are usually perfectly characteristic, are carefully weighed, and if the differentiation from other forms of arthritis is made by aspiration. The mortality and morbidity in this disease are usually due to delay, and the delay, in turn, is usually due to the fact that the physician considers the condition a non-suppurative arthritis and fails to employ aspiration to confirm or disprove his diagnosis.

The methods of treatment employed in the 66 cases handled by surgical measures included simple aspiration in 6, aspiration with irrigation in 2, incision and drainage in 28, and Willems' arthrotomy in 29, 28 on the knee and 1 on the elbow. In 16 cases repeated operations had to be done. Incision and drainage were necessary 9 times after a previous incision and drainage, 4 times after Willems' arthrotomy and once after simple aspiration. In another case amputation of the leg was finally necessary after Willems' arthrotomy on the knee, and in still another the development of an osteomyelitis necessitated osteotomy. The significance of most of these figures is clear, that in suppurative conditions halfway measures do not avail and drainage must be prolonged until the infection has entirely subsided.

Eight of these patients, it will be noted, were treated only by aspiration or by aspiration and irrigation, and the immediate results in 7 were excellent; 4 had normal temperatures within a week, and in the 3 others the improvement was progressive, although slower. One patient, who had a mixed infection, undoubtedly should have been treated by more radical measures, for his fever and other symptoms persisted until he left the hospital, against advice, on the twenty-eighth day. In the remaining 7 patients the period of hospitalization averaged 57 days, and in none was there any evidence of ankylosis on discharge. Whether convalescence was hastened or delayed by irrigation is a matter of debate; the method has its advocates, but Ellis and others have pointed out that it is scarcely a rational procedure in the early stages of the disease, since it removes the synovial fluid and its bacterial exudate.

It is rather generally agreed that Willems'

operation is the most practical procedure for suppurative arthritis of the knee joint, although it is rather more difficult to apply to other joints. Willems' own idea that immediate mobilization and weight-bearing promote drainage is correct theoretically, but against that advantage must be set the point made by Phemister, that destruction of the cartilage in suppurative arthritis begins at those points at which most pressure is applied. It follows, therefore, that early weight-bearing, while the synovium and cartilage are edematous, introduces this risk, and the patient's best interests would seem to be served by keeping him at rest, with slight traction, after operation and until his acute symptoms have subsided.

A most important consideration when the hip joint is involved in children is the ease with which, after the ligaments are destroyed and the joint is filled with fluid, the head of the femur can be dislocated. Coopermann has called attention to this accident in a discussion of acute gonorrheal arthritis in children and it happened in two instances in this series, once before admission and once after incision and drainage had been done and a four pound weight had been applied.

The mortality of 17.6 per cent, 12 of 68 cases, is rather higher than is generally reported —Harris' mortality in 49 cases, for instance, was 12.2 per cent—and for that reason it warrants a careful analysis. The first fact which impresses one is that in this study, as all too often happens in Charity Hospital, the negroes furnish most of the deaths, 10 of the 12 cases, 83.3 per cent. Furthermore, the negro death rate is almost 17 points higher than the white, 24.3 per cent against 7.4 per cent. These facts are not at all surprising to those who are familiar with the universal habit of the negroes of neglecting their diseases until it is frequently too late to do anything about them. The virulence of the infection unquestionably plays a large part in the final outcome, but it stands to reason, aside from this consideration, that the longer the infection has endured, the more likely are life and function to be put in jeopardy.

The two patients who died without surgery were admitted almost *in extremis* and died within a few days. Autopsy was permitted in both cases. The first patient, a negro male, had been ill for 3 months and exhibited multiple draining abscesses about the knee, associated with gangrene of the soft parts; postmortem disclosed, in addition, a Brodie's abscess and a Garré's osteomyelitis of the tibia. The other patient, a negro female, had been ill for 6 weeks with suppurative arthritis of both knees; she died of a staphylococcal septicemia, associated with a toxic nephritis and a purulent cystitis.

Incision and drainage was done in 8 of the other patients who died and the Willems' operation on the remaining 2. Four patients were operated on within 6 days and the remainder in from 17 to 57 days after the onset of their illness. The age range was from 9 months to 54 years, 3 of the patients being under 6 years. Four died of septicemia, 1 of pneumonia and multiple pulmonary abscesses, 1 of chronic nephritis and 1 of acute parenchymatous nephritis; in the remaining cases the cause of death was the local infection and the overwhelming toxemia to which it gave rise.

Many of these patients were seriously ill at the time of operation and were poor surgical risks from any standpoint. It is a striking fact, too, that in spite of the apparently adequate drainage in all cases, in only one instance was any clinical improvement noted after operation, and it was short-lived. The obvious conclusion is either that the toxemia was already too profound to be relieved by relief of the local condition, or that some other focus of infection was present and was not located. In all the patients who died of septicemia, the histories make it clear that the arthritis preceded the septicemia, though it is quite possible, of course, for the sequence to be reversed.

In spite of physiotherapy and other measures, 4 of the patients who survived left the hospital with ankylosis already evident. The others were discharged improved and apparently on the road to recovery, but we have no doubt that in many instances the end-results were equally bad, for patients of the type handled in this institution are inclined to disregard instructions and to consider systematic physiotherapy and similar measures as entirely unnecessary. An attempted follow-up has, unfortunately, been too unsuccessful to warrant inclusion, as it usually is in patients who change their place of residence as

often as do patients, particularly negro patients, of this class.

SUMMARY

From this brief review of 68 cases of acute suppurative arthritis the following points seem clear:

1. The disease is predominantly one of youth and early adult life.
2. It is the sequel of acute infectious arthritis in only a small proportion of cases, and in almost half of these the etiologic factor is not apparent.
3. Diagnosis is rarely difficult if the history and physical findings are carefully considered, and if aspiration is done promptly. The chief source of error is the omission of the latter measure, which is an infallible means of differentiating the suppurative from the non-suppurative forms of the disease.
4. Adequate drainage is the *sine qua non* of treatment. In a small number of cases aspiration alone is apparently effective but it should not be continued as an independent therapeutic measure unless improvement is prompt and sustained.
5. The high mortality and the poor end-results are sometimes due to the virulence of the infection but are all too frequently due to the patient's delay in applying for medical advice and the physician's delay in making the diagnosis and instituting treatment.

REFERENCES

1. Cooperman, M. B.: Acute pyogenic arthritis of hip joint in infancy and in childhood. Am. J. Dis. Child. 31:183-195, 1926.
2. Groves, E. W. H.: Synopsis of Surgery, ed. 9. New York, 1930, William Wood and Company.
3. Phemister, D. B.: Effect of pressure on articular surfaces in pyogenic and tuberculous arthritides. Ann. Surg. 80:481-500, 1924.

FOLLICULAR CONJUNCTIVITIS*

W. F. COTTEN, M. D.
McCOMB, MISS.

This disease, also known as follicular catarrh, is characterized by the occurrence of follicles with the symptoms of catarrhal conjunctivitis.

*Read before the Section on Eye, Ear, Nose and Throat at the Sixty-seventh Annual Meeting of the Mississippi State Medical Association, Natchez, May 9, 1934.

The descriptive term "conjunctivitis", according to De Schweinitz, may be applied to the affection if the signs of inflammation are associated with it. It is these cases of folliculosis accompanied by inflammation, secretion and infection that I have borne in mind while writing this paper.

About three years ago, I was asked by our local county health officer to visit a certain rural school for an inspection of the children's eyes. Out of 229 children, I found 91 affected with this disease. This was such a large per cent that I immediately sought the same information in our city schools where we found a goodly number of school children with the same condition but the per cent much smaller. Many of these cases have been very resistant to any form of treatment. I have treated one case weekly for two years without a permanent cure. There has been a very noticeable tendency toward recurrence of this condition in the same individuals. I have found mother, father and two children in one family with very massive follicles accompanied by a heavy muco-purulent secretion.

INCIDENCE

This condition is found everywhere; more so in particular localities and found most often between the ages of four and twelve. This disease has been found in children from two years on up. Two of the most malignant cases I have seen occurred in adults, one in a man 41 years of age and the other in a lady 85 years old. The latter was the most severe case it has been my privilege to observe.

It has seemed to me that the majority of cases under my observation have come from the rural sections. May I advance the idea that dust and wind, caused by school buses might be one of the contributing causes. The majority of the cases I have seen have come from one section of our county, though I have seen a few cases from practically every school. My cases have been seen in the well nourished as well as the poor and anemic, but the latter are in the majority.

ETIOLOGY

It occurs in all ages and sexes, but most frequently in children; is often found in children with poor hygienic surroundings, no outdoor life, errors of refraction and anemia. It is also found in schools and other overcrowded

places. Foreign bodies, exposure to wind, dust and smoke, the handling of books, pencils, handkerchiefs, as well as direct contact one with another may be causes. Hypertrophied tonsils and adenoids seem to come in for their share, since the majority of cases under my observation have had extra large tonsils and adenoids.

SYMPTOMS

The subjective symptoms vary with the severity of the disease. There has usually been found itching, smarting, sensations referred to the lids, lids feel hot and heavy as though there was grit beneath them. There is some photophobia, blurring of the vision, with a varying amount of secretion which also varies in character. This affection has usually been found in both eyes. Due to the presence of infection in the secretion, this may be spread to children who do not have folliculosis.

Objective symptoms: The conjunctiva of the lids is red, swollen and presents a variable number of small to large, round, oval or elongated red bodies. Some are arranged in rows, others are irregularly placed. These follicles consist of circumscribed aggregations of lymphocytes identical in structure with trachoma. There has been a larger number of follicles on the upper lids but the largest follicles have been encountered on the lower lids. The tarsal surface of the lids is rarely ever involved. No conclusive evidence has ever been introduced to prove that folliculosis is contagious, but it does seem to me that follicular conjunctivitis, which is seen so frequently, is contagious beyond question.

DIAGNOSIS

We have only the early stage of trachoma to rule out before making our diagnosis. In a few cases it is impossible by any known clinical signs or laboratory tests to distinguish between the two conditions. However, this comes easier after a few days of observation. Then too, we see so few cases of trachoma in our section until it is rarely ever confused. There is never any cicatricial formation, the follicles are absorbed, the surface of the conjunctiva returns to normal. In follicular conjunctivitis, there is a thick sticky muco-purulent discharge that often causes the eyes to be glued up in the mornings. In trachoma, the secretion is thin, watery and acrid.

TREATMENT

This disease tends to get well without any interference. However, it seems to me that treatment makes the patient more comfortable and reduces the duration of the disease.

Hypertrophied tonsils and adenoids should be removed, errors of refraction corrected, the general health improved and irritants minimized as much as possible.

A mild zinc or bichloride of mercury solution is often very helpful. In addition, I rub the lids once each week with boric acid powder which I think hastens a cure.

DISCUSSION

Dr. K. W. Constantine (Birmingham, Alabama): I haven't anything new to offer about this disease. I do not believe we see this condition as frequently as it used to be seen. I take it that when I was a boy, the oculist was calling this disease granulated lids and treating them indefinitely with alum and blue-stone. Ever since I have been practicing, I have tried not to treat those patients any more than I could help. The lymphoid tissue is more or less normal, most of them have adenoids and tonsils in a more or less diseased form. The only treatment I prescribe is boric acid solution—put it in the refrigerator, and use it in eye-cups several times daily and it will relieve the symptoms.

Dr. Cotten (closing): I appreciate the remarks of Dr. Constantine very much because my treatment of these cases has been rather discouraging.

When you read the text books and discuss these cases with your friends who are treating these patients, you find so many methods suggested that one is immediately impressed with the fact that there is no specific treatment for this disease. However, an observation of fifteen or twenty cases over a period of three or four months will be sufficient time to convince any one that these cases will get well regardless of whether any treatment is administered or not.

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THE CENTENNIAL NUMBER

This number of the Journal contains the addresses that were delivered at the Centennial Anniversary of the beginning of medical education in New Orleans under the auspices of the Orleans Parish Medical Society. This celebration was a notable one, and the addresses likewise were distinguished. The records of the celebration, more specifically the addresses, are to be permanently preserved in the New Orleans Medical and Surgical Journal for their historical interest and value.

As Dr. Matas points out, the new school was founded in New Orleans because, with the large influx of population into this section of the country in the early 19th century there was a definite need to be filled. Doctors were few and far between, and they had to be obtained by some measure or another. The founders of the school recognized this and supplied the means to meet the demands for medical care. For one hundred years now the school has provided adequately, well trained physicians to practice among the peoples of Louisiana, Mississippi, and the neighboring states. Medical education has been a boon to this neighborhood and the school has fulfilled a very definite need. May its first one hundred years be merely the opening up of still greater fields of service and accomplishments!

HEALTH OF NEW ORLEANS

The annual summary of the Bureau of Census of the Department of Commerce of the total deaths in New Orleans in the year 1934 is of some considerable interest, both from the point of view of the health of this great southern city as compared with other cities throughout the United States, but also as reflecting in a sense the probable mortality rates of Louisiana and to a lesser extent of Mississippi. In these two states, however, the mortality rate should be lower than it is in New Orleans, because it should not be forgotten that many of the deaths that occur in the City are of individuals who have been imported from outside of the City and sent to Charity Hospital. The large number of deaths in Charity Hospital of citizens of Louisiana living outside of New Orleans materially increases the death rate in the City.

During the year 1934 there were 7,725 deaths in New Orleans. Of these total deaths, 4,589 were white people and 3,136 were Negroes. The death rate in the City would be very materially lowered were the rate of the Negro population even closely approximating that of the white. The death rate in the former is 22.5 and in the latter population group 13.5. These two rates, properly portioned, give a total rate of

16.1. The infant mortality rate in New Orleans in white children reflects the total mortality rate in that it is materially lower, being 67, than is the colored infant mortality rate which is 125. This infant mortality rate compares favorably with most cities throughout the country, and is considerably better than in most of the southern cities that report weekly.

The death rate this past year was somewhat higher, 16.1, than it was in 1933 when the rate was 15.6. This rate is high, as compared with other American cities, being exceeded only by Memphis, Nashville, Washington, D. C., and Wilmington, Delaware. It is more than double the rate in one or two other cities, such as Milwaukee, South Bend, and Yonkers. Undoubtedly the rate would be considerably lower were it not for the reasons mentioned in the first part of this editorial.

The high colored death rate throughout the country, which is well above the white death rate in every city in which the rates of the two races are separated, indicates that there are probably two factors to explain why the Negro dies sooner and in larger numbers than does the white man. First, there is the element of lack of racial immunity to certain diseases. Secondly, and probably very much more important is the ignorance of the average Negro of the importance of consulting the physician when he is taken sick, of taking preventive measures to obviate sickess, and to continue treatment until he is cured. Part of this may be blamed upon economic conditions, but not much, because in a city such as New Orleans with the large clinics of the Charity Hospital available to the Negro, it is possible for him to secure immediate and continuous treatment at all times.

CHEMICAL TESTS OF PREGNANCY

The Ascheim-Zondek test of pregnancy is dependent upon the presence of a hormone in the urine of the pregnant woman, which is believed to be antuitrin, a hormone of the pitiutary gland, or the closer related antuitrin-like hormone of the placenta. This test is being used very generally throughout the civilized world, and it has been found to be an examination which is almost specific or about as specific as any biologic test can be. It has stood up well wherever it has been employed, and very little criticism has been made of its value. Unfortunately, as with other laboratory examinations which require the use of the living animal, it is beset with certain difficulties which obviously render it impracticable to use except under most fortuitous conditions, such as can be supplied only by large laboratories. It is obviously not a test for the general practitioner.

Were it possible to substitute for the biologic test a chemical reaction, then it would be at the service of every practitioner, provided of course that the technic would not be too time-consuming nor too difficult. A simple and definite reaction would be of tremendous service to medicine. Bowman, Visscher and Mull* have realized the pertinency of what has just been said and have been endeavoring to obtain a chemical reaction. It would seem, reading their article, that they are on the right track and when several technical difficulties have been smoothed out it is quite possible that a chemical reaction will have been evolved which will be practical, easy, and reliable. Without going into the details of their chemical reaction, suffice it to say that their preliminary report suggests great possibilities of elaborating a chemical reaction which fulfills the requirements stated above. With further simplification of their method this will be done. They report that with their technic in nineteen unknowns, 14 agreed with the Ascheim-Zondek findings. Four were false negative and one false positive. They state that 7 specimens from normal non-pregnant women were done without an error, and 5 who were known pregnant cases gave one false negative. If the chemical reaction can be made more accurate and the technic more simple, then indeed will it be a distinct advance in the field of diagnosis.

*Dowman, D. E., Visscher, J. P. and Mull, J. W.: Possible application of chemical reactions in the determination of pregnancy. Proceedings of the Society for Experimental Biology and Medicine, 32:522, 1934.

HOSPITAL STAFF TRANSACTIONS

TOURO INFIRMARY

The Annual Meeting of the Medical Staff of Touro Infirmary was held Wednesday, January 9, 1935, at 8:00 p. m., Dr. Sidney K. Simon, Chairman, presiding.

Drs. L. Von Meysenbug, H. L. Kearney, and Curtis Tyrone presented a case of streptococcus sore throat complicated by bilateral hemorrhagic mastoiditis. This was a case of a seven year old boy with an initial complaint of fever and sore throat. Shortly after the onset of this complaint the boy developed complicating infections in both mastoids, necessitating double mastoidectomy. Cultures from the ear and throat showed hemolytic streptococcus. The convalescence was rather stormy, necessitating three blood transfusions. The final recovery was complete, however. Dr. Hosen discussed the case.

Dr. Isidore Cohn spoke upon several cases of carcinoma of the transverse colon, demonstrating roentgenograms of the cases. He then discussed several cases of vascular disease of the extremities treated by means of the Paveax method. This presentation was discussed by Drs. D. C. Browne, J. C. Rodick, Alton Ochsner, and Allan Eustis.

Dr. Sidney K. Simon then read the annual report of the chairman upon the activities of the year.

The election of two representatives of the Staff at Large to the Executive Committee was then held, resulting in the re-election to the Executive Committee of Drs. Urban Maes and W. A. Reed. Following the discussion of several other matters of business the meeting adjourned to enjoy refreshments served by the hospital.

Willard R. Wirth, M. D.

MERCY HOSPITAL STAFF

A meeting of the Mercy Hospital Staff was held on December 20, 1934, in the Mercy Hospital class room, Dr. Ph. C. De Verges, presiding as chairman, Dr. E. L. Zander as secretary.

The scientific program began with a moving picture demonstration by Dr Geo. Mayer. Before presenting his pictures, Dr. Mayer brought out the fact that eclampsia could be determined by plotting curves of the blood pressure. An eclampsia case he pointed out showed a sudden rise of blood pressure with damage to the kidney following soon after.

The first picture demonstrated was one in which chloroform and chloral were used to control the convulsions. The results were not as good as could be expected and the mother died.

Second case was one in which the present treatment being used at Charity Hospital was demonstrated which consists of amytal intravenously and by hypo, morphia by hypo, glucose infusions and salts by means of a Levin tube as well as medication by the same method.

The case demonstrated showed perfect results, mother and child both living.

The second moving picture shown demonstrated the method of the liberation of the placenta. Dr. Mayer's picture brought out that there should be no rush in the delivery of the placenta. The picture was a perfect demonstration.

The staff then requested Dr. Mayer to show another picture which demonstrated the use of forceps. Here again the picture beautifully demonstrated the lack of the need of rushing in the use of the forceps, the method of applying the blades, as well as the fact that there should be periods of rest in which the blades are released while the actual delivery is being made, also, that where laceration is expected an episiotomy is performed and the technic of repair was also demonstrated.

The demonstration was discussed by Dr. Zander who complimented Dr. Mayer on the beautiful demonstration in technic as well as on results, stating that the same method is used in the treatment of eclampsia cases in his L. S. U. service as is being used by the Tulane school because of the excellent results.

Dr. Hauser then discussed the deaths.

The first case was one of inanition, acidosis and dehydration.

The patient, it was brought out, practically died of starvation due to his inability to get nourishment. There being nothing much to be discussed in this case a synopsis of the second case was read.

Case two was one of miliary tuberculosis, tuberculous meningitis and epididymitis and bronchopneumonia.

The patient was a seaman, age seventeen, who came in not looking extremely sick, complaining of a left epididymitis. He was running a slight temperature and the usual treatment was given; ice-cap and milk injections. The lungs on examination showed nothing at the time of admittance. Following an operation on this condition the patient showed signs of headaches, became restless and showed signs of a meningitis. Repeated taps were done; intravenous medication was given but the patient failed to respond and eventually he expired.

An autopsy showed evidence of a miliary tuberculosis of both the testes, the lungs, the spleen, the kidney and glands in the intestines and even the base of the brain. It also showed evidence of a meningitis and bronchial pneumonia. No roentgenogram had been made on the lungs preceding operation.

This case was discussed by the staff.

Dr. Gooch requested discussion of the use of tuberculin in these tuberculosis cases, also the question of where this case had originated.

Dr. Hauser stated that very probably it came from the mesentary lymph glands originally and that it was probably of long duration as the patient had an internal hydrocephalus.

The third case was one who died from hypertensive heart disease, marked decompensation, hypostatic pneumonia, chronic nephritis and arteriosclerosis.

The patient came in with feet swollen, spitting blood, no history of gonorrhea, rheumatism or syphilis. Blood pressure 150 over 100, dyspnea.

The lungs showed rales, the pulse was weak and the patient died a short time later from pulmonary edema.

The meeting was then adjourned to the executive session.

Edwin L. Zander, M. D., Secy.

BILOXI HOSPITAL STAFF MEETING

The following officers were elected at the regular staff meeting, January 4:

President—Dr. B. Z. Welch.

Vice-President—Dr. Felix Harrel.

Secretary—Dr. F. O. Schmidt.

F. O. Schmidt,
Secretary.

KING'S DAUGHTERS' HOSPITAL STAFF MEETING

Greenville

The regular monthly meeting of the King's Daughters' Hospital Staff was held Wednesday evening, January 2, Dr. John F. Lucas presiding.

Dr. Acree brought to the attention of the staff the obstetrical lectures for physicians sponsored by the State Medical Association, Tulane and the Commonwealth Fund.

Dr. H. A. Gamble discussed the recommendations of the medical advisory committee for the handling of infectious cases in the hospital.

The program was as follows:

Dr. J. A. Beals—Radiation Treatment of Erysipelas.

Dr. G. W. Eubanks—Report of Two Cases of Gastric Hemorrhage.

Dr. J. W. Shackleford—Monthly Morbidity Report.

Dr. Shackleford called attention to the recent regulations of the State Board of Health requiring druggists and others handling biologics to store these between 50° and 38°F. He stated that the Health Department was checking refrigerators and storage compartments to secure compliance with this regulation for proper protection of the various sera and antitoxins.

Dr. E. T. White discussed the necropsy findings on a recent and unusual case of repeated hemorrhage of the bowel.

John W. Shackleford.
Secretary.

ABSTRACT.—Report of Two Cases of Gastric Hemorrhage.—Dr. G. W. Eubanks.

The histories of two middle aged, white males, whose chief complaint was gross hemorrhage from stomach and bowel were reviewed.

"The two cases of gross gastric hemorrhage to be presented are of interest in that in both cases the hemorrhages were of alarming proportion; also the apparent abatement of all symptoms, one case in its third year, the other in its second year. In both cases no focus of infection was found but in one case the peptic ulcer seemed to be the causative factor of a rheumatic condition of the shoulder.

"Gordon and Kiefer are not encouraging as to the cure in such conditions. They state the life history of an ulcer in an ulcer-bearing individual ends only with the life of the individual; the purpose of medical management is to produce a remission and prevent a recurrence. Crohn finds a mortality of only 2 per cent in gross hemorrhages and thinks that we should not become panicky over the hemorrhage as it is effective in causing healing and that if the ulcers are not x-rayed soon afterward one is likely to miss them as we did in both cases; that if one waits ten days or two weeks for a resection it is no longer possible to recognize the ulcer. Specimens of ulcer resected three weeks after a gross hemorrhage showed complete healing of the ulcer and a disappearance of the lesion."

ABSTRACT.—Radiation Treatment of Erysipelas.—Dr. J. A. Beals.

Erysipelas is an acute infectious disease, usually running a course of from four to eight days up to three weeks or more. There is high fever and marked constitutional symptoms of toxemia.

Local applications are indicated for the relief of burning, pain and edema of the skin, of which hypertonic solutions, such as that of epsom salts, are most often employed.

Until the advent of immune serum therapy nothing definitely of advantage seems to have been added to the treatment of the disease itself. This is well shown by the report of Symmers and Lewis of Bellevue Hospital, N. Y. From 1904 to 1926 there were 15,277 cases of erysipelas treated by various methods but without serum. The mortality was 10 per cent. From 1927 to 1932 the mortality was 7.1 per cent in 3311 cases receiving polyvalent serum. Of equal importance was a 60 per cent reduction in the number of days required for recovery.

The use of ultraviolet light has been advocated. In 1934 Nightengale and Starr (King's County

Hospital, Brooklyn) investigated the effects of serum and ultraviolet treatment in children. They found that for children over one year of age, the two forms of treatment gave approximately equal mortality, and the same as in adults, but the days of illness were shortened for the ultraviolet group. For children under one year of age, the mortality was 60 per cent for those treated by serum, and about 40 per cent for those treated by ultraviolet with a reduction of days under treatment from 15 to 7½. They found both forms of treatment more efficacious if given early in the disease.

In 1932, Windmann, Philadelphia General Hospital, reported 97 cases of erysipelas treated by roentgen ray, contrasting them with an equal number receiving general medical attention. His results parallel those of many others which have been reported, usually on smaller series. The temperature fell to normal at the end of the first day in 17 per cent of cases, 37 per cent were normal within two days, 55 per cent were normal within three days. Only 6 per cent extended beyond eight days. Those receiving no x-ray treatment showed a return to normal temperature within six days in 20 per cent and 25 per cent maintained an elevated temperature for 10 to 25 days.

Windmann used ¼ to 1.3 of an erythema dose, repeating as the area of skin involved spread. Others have advocated an application of unfiltered roentgen ray just short of that amount which should cause an erythema of normal skin, and this has been my preference. I have occasionally had to treat a second or third time on successive days, as the erysipelas spread to new regions not previously treated, but in doing so I have been very careful to shield with lead foil the areas first radiated. My preferance for large doses of roentgen ray in this inflammatory condition of the skin has been influenced by experience with roentgen ray treatment of furuncles which certainly do better if treated by a single dose even exceeding an erythema. I have had no experience with fractional roentgen ray doses and very little observation of the effects of ultraviolet. Following the single dose of roentgen ray the fever has usually approached normal within 48 hours and the skin involvement has ceased to spread. The change in the patient's conditiion is at times dramatic. However, results have not always been so gratifying, and a few cases have seemed to run their course very much as though no treatment had been given. So far I do not recall a fatal case. In a disease as serious as erysipelas, especially in children, there seems no point in relying on roentgen ray or ultraviolet treatment alone, for their use does not preclude any other treatment, especially that of serums.

I know of no large series of cases contrasting the effects of roentgen rays and ultraviolet rays. Either form of radiation may prove equally effective; certainly ultraviolet is safer. My own feeling is that roentgen ray may have an advantage in being distinctly more penetrating. The mode of action of either radiant energy on this and other inflammatory conditions is so poorly understood that for the present, it had best be accepted empirically. The actual benefit from the use of roentgen ray is too apparent and consistent to be seriously questioned.

Mr. B., aged 21 years, had a recent laceration of skin of forehead. On admission 12/15/34, T. 104°, P. 120, R. 30; typical erysipelas of forehead, face and anterior part of scalp. Antitoxin given 12/17/34; followed by roentgen ray to involved area, 3/4 to 1 erythema dose. Clinical improvement at 24 hours; comfortable at 48 hours with T. 100°; at 72 hours T., P. and R. normal. Discharged.

This case illustrates rapid improvement of facial erysipelas, a type which is more severe and protracted as a rule, than when other parts of the body are involved. The favorable result cannot be attributed to either roentgen ray or antitoxin alone as both were given. Radiation may cause temporaray loss of hair in this case and the patient was so warned. Ultraviolet radiation could not have been given without first clipping the hair of the scalp.

Mr. J., aged 34 years, was ill, having fever and chills, with painful swelling about right knee, for one week before admission. Admitted 2/15/34; erysipelatous area without sharply defined margins, six inches in diameter, over the anterior aspect and sides of right knee; T. 104°; P. 100; R. 20. Given antitoxin intramuscularly, 2/16/34; x-ray ¾ erythema dose. Forty-eight hours later T., P. and R. normal; clinically much improved. However, on the fifth day after roentgen ray treatment the erysipelas had spread a little above the knee and temperature had risen to 101°, and his general condition was not so good. The new skin involvement was treated with roentgen ray and on the following day the patient returned to normal. There was a third exacerbation on the 10th day after admission with a new spread of erysipelas to the upper thigh, temperature reaching 103°. Roentgen ray treatment was followed in 48 hours by return to normal. Total duration of disease 18 days; duration after the first roentgen ray 11 days.

This case is typical of those with multiple recurrences, each of which responded to roentgen ray treatment by a return to normal within 48 hours. Treatment was instituted late, one week, which may have influenced the course unfavorably.

Miss D., aged 7 years. Four days before admission developed chills, high fever, with spreading erythema around a small pimple on rigt forearm.

On admission 4/4/34, 104°, P. 120; R. 22; erythema involved entire right forearm to the elbow. Roentgen ray ½ to ¾ erythema dose to involved forearm. Some clinical improvement followed but temperature ranged from 99 to 102° until 4/7/34, three days after roentgen ray treatment, when erysipelas had spread to the shoulder. A second roentgen ray treatment was given, limited to the upper arm. During the next 24 hours temperature ranged 97° to 100°. The following day T., P. and R. were nearly normal. Duration of disease from onset 9 days, from the first roentgen ray treatment 4 days.

This child had no treatment directed to control the disease except roentgen ray treatment. This was not instituted early and two treatments were necessary, but the response was most gratifying.

Master C. C., aged 7 years, onset 2 days before admission on 10/25/33 with fever, chills, prostration and erysipelatous eruption of forehead. On admission the eruption had spread to both temporal regions; T. 105½°, P. 120; R. 30. Condition remained unimproved under local treatment for 48 hours when ¾ erythema dose of roentgen ray was applied over forehead and both temples. Twenty-four hours later there was improvement but eruption had spread to cheeks which were similarly treated by roentgen ray. On this day a transfusion of 150 c.c. blood was given. Twenty-four hours later the highest temperature was 102°, and at the end of 48 hours had returned to normal. Total duration 7 days; duration after first roentgen ray treatment, 3 days.

This child was quite toxic but his disease was promptly controlled by roentgen ray treatment and blood transfusions.

J. T. NIX CLINIC
New Orleans

At a meeting held in January, Doctor C. E. Gorman presented the following paper.

THE RHYTHM THEORY OF THE MENSTRUAL CYCLE

In the European literature of the past twenty years one may find many articles on the safe period. Since about 1925 this has been called the Ogino-Knaus theory. Only within the past five years has this subject become prominent in the journals of America. It has assumed the name of the rhythm or cycle theory.

This theory is based upon natural laws of human physiology. Therefore even the most scrupulous of people are not offended at this type of birth control. It is a selective means and not a preventive or contraceptive system. It is accepted and approved by the medical profession as the ideal if it can be removed from the realm of theory and placed among the natural laws. Furthermore it has received the approbation of the clergy of all denominations, and the public in general. It does not offend the theological or ethical laws.

This paper is a preliminary report of information gathered from the patients of the J. T. Nix Clinic. Several hundred cases were interviewed, being taken from the gynecological and obstetrical services. The doubtful cases were discarded. Those from which positive data could be obtained and which could be followed from month to month were selected and filed. This number totals thirty-three, most of these having been followed for the past fourten months. Two of the cases, one a multipara of six children and the other of three children, have not conceived for the past three years. It is this information from which the conclusions of this article are drawn.

Among the obstetrical cases now on hand is one who figured her own dates of sterility after reading one of the current books on the subject. In our opinion there is no book today which is explicit enough for the laity to safely decipher the scientific meaning. They are too technical and one published as late as 1933 is at a complete variance with the others.

Much criticism has been cast upon this system because it is still in the realm of theory. Attention is called to the fact that the Birth Control Clinic Research Bureau, New York,[1] recently tested 100 contraceptives. Of this number 45 were found to be unreliable. This would tend to increase the number of abortions and thus the number of deaths. A correspondent of the American Medical Association reported from Bucharest a maternal rate of 60,000 yearly[2] due directly to criminal abortions. Likewise Spitzer reports 25,000 deaths yearly[3] in Germany from induced abortions. This death rate is astounding! The Ogino-Knaus theory offers much in the way of physiological prevention of conception.

This theory is based upon the time of ovulation being a factor in the time of menstruation, i. e., that ovulation occurs between the 12th and 18th day prior to menstruation,[4] also upon the short fertility of the human sperm and ovum which is suggested as being approximately forty-eight and twenty-four hours, respectively. Therefore the fertile period is limited within a few days, specifically the 12th to the 18th day prior to the next menses.

It is the opinion of the writer that the degree of safety can be materially increased by lengthening the fertile period. There are so very many factors involved in ovulation that regardless of the regularity of the menses this must be considered as a variable factor, even beyond the 12th. Whereas these dates may hold true for nine out of ten menses the tenth can be taken care of by shortening the safe period a few days. Thus the added days of fertility should take care of any variation

which is liable to occur. In support of this the work of Boas[5] can be quoted. He followed twelve pregnant cases in which the dates of the marital act were known. Nine out of the twelve conceived during the fertile period. One conceived on the eighth day prior to the expected menses. Another conceived on the last day of the post menstrual safe period. The twelfth patient had three pregnancies of known conception; the first and third occurred during the fertile period; the second child was conceived during the safe period. This series shows definitely the variability of the factor concerned. Also the possibility of pregnancy when following the strict rhythm theory.

Whereas its true value in the realm of science is still unknown it enables the medical profession to aid a great number of people. It helps both those who desire and those who do not wish children. This is a great boon from an economical as well as a health viewpoint. A case of each type is quoted below:

Case No. XVIII. Mrs. R. C.

Aged twenty-six years. Married three and one-half years. One miscarriage very soon after marriage. Both husband and wife had cooperated in every way to secure a pregnancy. Very regular twenty-nine day cycle. Asked for advice in January, 1934 and dates were given to her. Because of a severe cold the fertile days given were not used. Menses followed February 1, 1934. Fertile days were advised as being February 12th to 18th. The marital act was consumated on February 13, 1934 as the only date of the month. She conceived. Delivered a full term, normal, healthy child. In this case the accuracy of the fertile period is well illustrated.

Case No. V. Mrs. I. F.

Married for seven years. Four children. Reason for desiring information was two-fold. Economical, because the husband was barely making enough to feed and clothe them. No luxuries were enjoyed. Health,—because she had an incipient tuberculosis infection which flared up during the last pregnancy. She gave an irregular menstrual cycle between 26 and 33 days. On November 15, 1933 a correspondingly long fertile period was advised adding three days before and three days after the normally designated fertile period. She is now in her fifteenth month under this system and no pregnancy. The general health has improved since the fear of another pregnancy has been removed.

Case No. XV. Mrs. L. T.

Aged thirty-one years. Married nine years. Has had five pregnancies all of which ended in miscarriage—the last was the shortest with a six weeks foetus. The first was a seven months pregnancy. All known laboratory work was negative, including the Wassermann. Irregular menstrual cycle from 28 to 31 days. On April 29, 1934 sterile periods were given and no pregnancy has resulted since under observation.

Case No. XXVII.

Mother of six children, ages three to twelve. Pregnant almost yearly previously to 1931. Began following Latz-Rhythm[6] theory in March, 1931 and no pregnancy has resulted.

Case No. XXVI.

Mother of three children, ages three to six years. Has been following Latz-Rhythm[6] theoroy for three years, no pregnancy resulting.

A total of 33 cases have been following this plan of physiological prevention of conception. In none has conception followed where instructions were faithfully carried out.

COMMENT

1) There is a sterile and a fertile period for every fruitful female.

2) The actual term of the fertile period corresponds closely to that laid down by previous observers, namely, the 12th to 18th day inclusive, preceding the next regular menstruation.

3) There are so many variables for each individual that in order to make the estimated fertile period safe, it should usually be lengthened to include this period between the 10th to the 20th day before the next menstruation.

4) Because of the great variation in the human menstrual cycle and the corresponding fertile period, no one set of rules as yet produced can apply to every case and for this reason the estimated time of fertile and safe periods should be furnished by the family physician.

BIBLIOGRAPHY

1. Contraception and Birth Control (Edit.) J. A. M. A. 103:10; 756, Sept. 8, 1934.

2. Foreign Letters. J. A. M. A. 101:10.

3. Dangers of Induced Abortion, W. Spitzer, Zentralblatt fur Gynokologie, Leipzig, 57:1505-1568, June 30, 1933.

4. Ovulation and Fertilization, Queries and Minor Notes, 101:4.

5. Reliability of Periodic Abstinence as Method of Birth Control, C. van E. Boas; Nederl. tijdschr. v. Gynesk; 78:1938-1951, May 5, 1934.

6. The Rhythm, Leo J. Latz, M. D.; Latz Foundation, Chicago, Ill.; 1932.

THE OSCAR ALLEN TUMOR CLINIC
CHARITY HOSPITAL
NEW ORLEANS

The scientific meeting of January was called by Doctor J. T. Nix, Director. The essayist was Doctor J. M. Miles, who presented the following paper:

SOME GENERAL CONSIDERATIONS IN THE X-RAY TREATMENT OF MALIGNANCY

In outlining a plan of roentgen ray therapy for a patient afflicted with a malignant growth we have several courses open to us. For convenience and in keeping with the routine procedures used for

the patients of the Tumor Clinic we shall list them as:

MASSIVE DOSE THERAPY in which one tries to approach the limit of tolerance in one treatment or within a short period of time, such as twenty-four hours.

PROTRACTED SMALL DOSES in which a small amount of roentgen ray is given to the lesions daily or twice daily for a period of thirty to forty days.

DIVIDED DOSES in which at stated intervals, usually one week, sometimes two or three days, the patient is given a fraction of the total dose desired.

PERIODIC INTENSIVE COURSES in which daily treatments are given to the patient through more than one portal, as much radiation being given as the patient can tolerate; so that the limit of tolerance is reached in from two to three weeks, the entire course being repeated at intervals varying from two to six months.

The choice of method used depends upon many factors, the most important of which are the type of tumor (gross and microscopic), location of the tumor, general condition of the patient, and the social and economic status of the patient.

MASSIVE DOSE THERAPY

By massive dose is meant one erythema dose (750 r) or more of deep roentgen ray or in the case of smaller superficial lesions, six (2040 r) to twenty-four (8160 r) erythema doses of superficial radiation.

Massive doses may be applied to tumors of a fungating or protruding nature, such as can be irradiated tangentially i. e., without directing the ray into the body cavities and to tumors of the extremities.

Whenever deep roentgen ray is directed into the neck, chest, or abdomen in large doses radiation sickness with its symptoms of nausea, vomiting, weakness, and apprehension will occur. It is apparent that marked radiation sickness is a contraindication of a massive dose in an already weak cachectic individual. In the case of extremities roentgen sickness from massive doses is negligible.

Another contraindication is the too rapid disintegration of a sensitive tumor or portions of a tumor followed shortly by profound systemic effects with an associated depletion of the alkali reserve of the blood, and in increase in nitrogen retention in the blood. Death may supervene. Even should death not occur the marked slough predisposes to infection and during the delayed healing, pain is severe. However, these latter symptoms may also follow other types of therapy when too intensive.

In the case of superficial therapy massive doses are practically confined to skin malignancy. The lesion is, by comparison, small and the radiation is absorbed in the superficial tissue of the body. Thus local and not systemic reaction results. The effect is that of a severe burn or cauterization. The inflammatory reaction is marked and the pain severe. The ill effects may last from four to six weeks.

To summarize, massive doses are desirable in as far as producing the death of the malignant cell is concerned but are most often rejected because of the several constitutional symptoms which may hasten the death of the patient. Should the patient survive these, the devitalization of the tumor bed (i. e., the non-malignant tissue surrounding the malignancy) from thrombosis of the blood vessels and diminished blood supply results in such pain and slough with seconday infection and delayed healing that the single maximum dose method may not be advisable.

PROTRACTED SMALL DOSE THERAPY

Protracted small doses have the advantage of irradiating the malignant cell in all stages of its development during sensitive as well as resistant phases. Systemic reactions are avoided, and although the local inflammatory reaction may be somewhat painful and troublesome, healing and recovery of the inflammation take place and sloughing is avoided. This is a method entailing a little more time and trouble on the part of both the radiologist and the patient but, I believe, one which should be used in more cases, particularly the less advanced cases. Unfortunately with a clientele of poor patients many of them from the country and with a large volume of work this method can not be employed as frequently as we would like.

DIVIDED DOSAGE

Divided doses in which the patient returns regularly, generally once a week for a single treatment are sometimes necessary but, to be effective, must be sufficiently large to have some real effect upon the cancer cell and must not be prolonged to the extent of producing an adverse effect upon the tumor bed. Small exposures to the ray fail in this method because the roentgen ray effect never catches up as it were, with the continued growth of the tumor. Aside from failing to produce any apparent retardation of the growth, the tumor bed becomes so deficient in nourishment from occlusion of the blood vessels by endarteritis and from fibrosis that a persistent ulceration forms surrounded by a zone of subacute inflammatory tissue.

This method, however, does have a field of usefulness in far advanced malignancy which may have been incompletely treated and now fails to respond well, or which may show recurrences, or possibly ulceration. We know the patient is going to be under constant treatment the remainder of his life and we administer roentgen ray sparingly, in an attempt to inhibit extension of the

disease and control pain but at intervals sufficiently far apart so that the roentgen ray does not aggravate the malignancy.

PERIODIC INTENSIVE COURSES

Periodic intensive courses of radiation is the mode of treatment which to date we have found to be the most ideal form in the majority of instances. In this form of treatment irradiation is given daily, single treatments being the maximum the patient can stand, and the total series reaching or extending beyond the skin tolerance and producing a reaction characterized by vesiculation, desquamation, and tanning.

A series is completed in from ten days to three weeks, a duration of time in which it is possible to hospitalize the patient. The series is repeated depending upon the nature of the malignancy in two, four, or six months, the intervals becoming larger as improvement is seen.

The advantage of this method is that daily irradiation is given, as in the protracted method, affecting the cancer cell in all its stages. The larger dose at each single treatment gives a great initial effect upon the growth, but the reaction in the normal tissue is not so great as to produce permanent injury or loss of vitality of this tissue as may happen in the use of massive doses. However, here as in the other methods, judgment must be exercised for the end and result of a course, too intensive, may in certain locations and tumors produce the same slough which follows a massive dose.

As I have indicated it is my preference to administer periodic intensive series or when feasable protracted small doses. Nevertheless, on occasion massive doses are desirable, as in bone metastases especially when they are limited as in the vertebra. In bone or other deep seated primary tumors in the extremities massive doses also can be used treating the lesions through numerous portals. Divided doses, as already mentioned are applicable in far advanced cases where only paliation is scught.

In considering the treatment in the various subdivisions of the body one must be cognizant of the reaction of that part of the body to radiation, the type of tumor bed it produces, and possible dangerous sequelae characteristic of that region.

FACE AND LIP

Basal and squamous cell carcinoma I prefer to treat every other day giving two to four erythema doses of superficial unfiltered radiation until a total of from twelve to twenty-four erythema doses has been administered. A massive dose is too severe for the patient and divided doses at greater intervals and less intensity are likely to result in a chronic roentgen dermatitis and ulceration. In planning a course of treatment the object should be to give the maximum safe dose in one course, in as short a period as possible, having in mind that recurrences or incompletely healed lesions fail to respond as well the second time.

NASO-PHARYNX AND HYPO-PHARYNX

In directing the roentgen ray into the throat one has to contend with an epithelitis of the pharynx, larynx, and salivary glands in addition to the desquamation of the skin. Difficulty of swallowing, hoarseness and a sense of dryness with excess mucus formation are the disagreeable symptoms produced by intensive radiation. Daily treatments of 400 r at 200 KVP until 1600 to 2000 r has been given to each side of the neck is used but occasionally an unfavorable result will occur with slough and secondary infection if one routinely administers that amount of radiation.

When single heavy doses (750 r or one erythema dose) are administered swelling, pain and nausea may be expected. Edema of the glottis necessitating an emergency tracheotomy has been described, but in our experience has not occurred.

BREAST CARCINOMA

The therapy applied to breast malignancies has been discussed in a previous paper presented to the Clinic, but we might restate that believing small divided doses to be ineffectual and massive doses not tolerated because of the marked radiation sickness which follows the radiation of the underlying lung tissue, we prefer periodic courses of an intensive irradiation including preoperative irradiation.

CHEST MALIGNANCIES

Malignancy of the bronchus, lung, pleura, hilum, and mediastinum are included in this group. The great majority of our cases have been of the bronchus and response to radiation has not been as much as is desired. The most improvement to date has been obtained in those cases which have received daily intensive doses (400 r) until the skin reaction contraindicates further therapy. Constitutional improvement has been great, but no recession of the tumor has been observed on radiographs, and death has followed in a few months in practically all cases. Incidentally the tolerance to irradiation is greater in the malignant than in a normal lung, and radiation sickness is less likely to follow.

ABDOMINAL MALIGNANCIES

Irradiation applied to the abdomen produces severe radiation sickness and the depth of the lesion as well as other factors, make it difficult at present, to deliver sufficient radiation to the tumor to be effective. Addison's disease may follow too heavy irradiation of the adrenal glands, and ulceration of the intestinal mucosa with perforation is a possibility that should be considered.

PELVIC MALIGNANCIES

Pelvic malignancies include those of the bladder, prostate, uterus, ovaries, rectum and the bones of

the pelvis. A carcinoma of the cervix may be taken as an example. Treatment is given through four portals with daily administration of 400 r to one portal until 1600 to 2000 r are given to each portal. This may precede or follow radium application. X-radiation first is recommended to be followed by radium application. When the total dose is great, overlapping of radiation in the rectum or bladder produces an inflammatory reaction of the mucosa with disagreeable symptoms of burning and pain. Radiation sickness in pelvic irradiation is less than in the upper abdomen.

EXTREMITIES

In the case of tumors of the extremities three to four portals can be employed giving a massive dose through each, but even here, more radiation can be delivered into the tumor by dividing the dose. Full erythema doses of deep irradiation can be given without systemic reaction but with a rather intense skin reaction.

SUMMARY

The various modes of treatment employed in the roentgen therapy or Tumor Clinic patients are reviewed and discussed. Generalizations, unfortunately, can not be eliminated from the discussion. Periodic courses of intensive radiation we consider to be, at present, and in view of many diverse factors, the method of choice in most instances.

VICKSBURG SANITARIUM STAFF MEETING

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on January 10. After a report from the records department and analysis of the work of the hospital and the report of vital statistics from the Warren County Health Department by Dr. F. Michael Smith, Director, special case reports were presented as follows:

1. Folliculoma of Ovary.—Dr. G. M. Street.
2. Heart Block—Three Cases.—Dr. L. J. Clark.
3. An Unusual Case of Typhoid Fever.—Dr. G. C. Jarratt.

Selected radiographic studies were presented and discussed as follows: Osgood-Schlatter's Disease; Apophysitis Calcaneous; Pulmonary Tuberculosis; Lung Abscess; Cholelithiasis (two cases); Trichomonas Colitis.

Three-minute reports of the literature of the month were presented as follows:

Dermatomycoses; and Membership of Doctors in the British Trade Union Congress.—Dr. L. S. Lippincott.

New Methods in Gallbladder Surgery; and Subtotal Hysterectomy versus Total Hysterectomy.—Dr. J. A. K. Birchett, Jr.

Bacillus Fecalis Alcaligenes Meningitis; and Cyanosis of Newborn.—Dr. G. C. Jarratt.

Uric Acid in Prognosis in Eclampsia.—Dr. R. A. Street, Jr.

Prenatal Administration of Drugs as an Influence on Deafness; and Types of Headaches.—Dr. H. H. Johnston.

Officers for year of 1935 were elected as follows:

President, Dr. R. A. Street, Jr.

Vice-President, Dr. W. E. Johnston.

Secretary, Dr. L. S. Lippincott.

Dr. F. Michael Smith was elected to honorary membership.

The next meeting of the staff will be held Monday, February 11, at 6:30 P M.

ABSTRACT.—Folliculoma of Ovary.—Dr. G. M. Street.

PATIENT.—White female, aged 67 years, admitted to hospital December 12, 1934.

CHIEF COMPLAINT.—General weakness and malaise; vaginal bleeding; swelling of abdomen; backache. Present Illness.—Menopause 17 years ago with no vaginal discharge or bleeding up to one year ago. At first bleeding was very scant and at irregular intervals but gradually became more profuse. For past three months more or less continuous discharge and numerous attacks of excessive hemorrhage, so much that she has been in bed most of the time for past six weeks. Has been examined by two physicians who assured her that they could see no signs of cancer of cervix and the bleeding was evidently caused by the tumor and advised that she go to a hospital. Past History.—Severe attack of measles at age of 55 years, complicated by pleurisy and prolonged cough. Was thought to have pulmonary tuberculosis at the time but recovery was complete in a few months and there has been no recurrence of cough. Right foot amputated about 12 years ago for a diseased condition in ankle which was said to have been tuberculosis. Has had six children and one miscarriage; only two children living. Family History.—No tuberculosis or cancer and otherwise not remarkable. Physical Examination.—Well developed but poorly nourished; skin sallow; all teeth gone except five which are loose and show advanced pyorrhea, no plates and no chewing surfaces. Heart moderately hypertrophied; rate 92; rhythm regular; moderately loud systolic murmur over apex, transmitted towards axilla. Blood pressure 190/110. Few rales at bases of lungs posteriorly. Abdomen prominent. Large rounded mass extending from pelvis to two inches above umbilicus, which gives the abdomen the contour of a seven month's pregnancy. No particular tenderness, and mass feels cystic. Lacerated perineum with moderate cystocele and rectocele. External hemorrhoids. Cervix large with external os gaping showing polyp size of marble; cervical tissue around polyp clean and normal in appearance. Moderate mucous and bloody discharge but polyp does not bleed on sponging; bleeding is from above polyp. Bimanual palpation

shows pelvis filled with lower portion of abdominal mass, slightly movable and fluctuating. Uterus of moderate size; fundus can be palpated and is forward and to the right of the large mass which appears to be the left ovary. LABORATORY.—Erythrocytes 3,560,000; hemoglobin 80 per cent; leukocytes 6,300; small lymphocytes 25 per cent, large lymphocytes 3 per cent; polymorph neutrophils 72 per cent of which 25 per cent were band forms; no malaria found. Catheter specimen of urine negative. Urea nitrogen 32.69 mg. per 100 c.c.; uric acid 1.2 mg; creatinin 2 mg. Blood Wassermann, Kahn, Kline and Young and Eagle flocculation tests negative.

Roentgen ray examination of chest shows no evidence of tuberculosis, no scarring suggestive of previous tuberculosis.

Treatment.—Put to bed and measures instituted to bring her general condition up to a point where surgical treatment could be undertaken; intramuscular concentrated liver extract, large doses of reduced iron by mouth, forced feeding of liquids and soft foods, intravenous calcium gluconate. On admission patient did not appear to be a candidate for even minor surgery.

Operation.—December 18, general condition showed marked improvement and operation was performed. Through low medium incision mass was found to be a large cystic tumor of left ovary. After withdrawing about six quarts of fluid through a trochar with suction, tumor was rapidly removed together with left tube. Uterus was moderately enlarged and contained several small fibroid nodules. Appendix was atrophic and was not disturbed. Right ovary was atrophic and hard, no larger than an almond and it was not disturbed. Abdomen closed without drainage. Cervix was then dilated, cervical polyp removed, curettage performed and 50 mg. of radium inserted in fundus to be left for thirty hours in order to shrink the fibroid nodules in the wall of the uterus.

Total hysterectomy was the surgical procedure of choice in this case but it was considered out of the question on account of the greatly added risk due to the advanced age and poor general condition. We felt that the procedure adopted would give relief and the risk was much less.

Pathological Examination.—Left ovary is a mass of cysts, multilocular, some containing pale yellow fluid, some red-brown fluid, some blood clot. Few areas solid and on cross section, yellow; largest solid area 1-1/4 x 1x1 inch. Microscopic: Folliculoma (granulosa cell tumor).

Uterine scrapings show glandular hyperplasia, some gland papillary and suggesting menstruation. Polyp-Adenoma. Left tube slight chronic inflammatory, appearance of tube of woman in child bearing age.

COMMENTS.—The uterine bleeding, hyperplasia, and lack of atrophic changes in uterus and tube were unquestionably due to the excessive production of folliculin by the granulosa cells just as hyperplasia in women of reproductive age may be due to hyperfolliculinism. As to the malignancy of these tumors, Novak and others have stated in recent articles that the degree of malignancy in most instances is very low and recurrences are exceptional even after removal of only the affected ovary. However in from five to ten per cent of the reported cases there is a high degree of malignancy with recurrence, metastasis, and death.

ABSTRACT.—An Unusual Case of Typhoid Fever. —Dr. G. C. Jarratt.

PATIENT.—White male, aged 11 years, first seen November 29, 1934.

HISTORY.—(From mother).—Well up to May, 1934 when he had continuous fever of 101 to 105°F. for ten days; no headache, no diarrhea; only moderate sweating; only complaint "no appetite." Was then free of fever for 14 days when fever recurred and lasted for ten days with no complaint except moderate sweating. Similar periods of fever at intervals have recurred for seven months without variation. Child had been given 3/4 grain of atabrine, three times a day, for 10 days followed by 1/6 grain of plasmochin, three times a day for 14 days in May and again six weeks ago. Had just completed a third course of atabrin and plasmochin. In addition had had quinine freely. Under care of several physicians with diagnosis of "malaria" and "amoebic dysentery." *PAST HISTORY.*—Measles in 1933; pertussis; mumps; no other contagion. Toxoid without Schick test; no vaccination; typhoid vaccine in 1930. Tonsils and adenoids removed at two years of age. Good health up to present illiness. *PHYSICAL EXAMINATION.*—Well developed and fairly well nourished; temperature 98°F.; pulse 86; blood pressure 120/68; generalized greenish yellow discoloration of skin but none of sclera (probably due to atabrine). Soft systolic murmur over precardium heard best inside apex and not transmitted. Enlarged spleen, three fingers below costal margin; liver two fingers below costal margin; some distention of abdomen. Physical examination otherwise not remarkable. LABORATORY.—Mantoux (1-1000) negative. Blood Wassermann, Kahn, Kline and Young tests, negative. Hemoglobin 77 per cent; erythrocytes 4,090,000; leukocytes 7,300; polymorphonuclears 37 per cent, lymphocytes 63 per cent. No malaria found. Agglutination tests for typhoid, paratyphoid "A", paratyphoid "B", and undulant fever negative. Repeated blood examinations gave no further information. Blood culture, no growth. Several specimens of urine negative except for 6 to 15 leukocytes per high power field (centrifuged specimens). Routine stool examinations showed some pus. Roentgenograms of chest were negative except diaphragm high on each side. Intravenous

pyelograms with skiodan, negative. *COURSE.*—During stay of five days in hospital there was no fever. Discharged on Dec. 2, 1934 with instructions to return if fever recurred. Regular diet; rest in bed; one lextron capsule three time a day before meals; three grains of urotropin and five grains of ammonium chloride three times a day after meals. *DIAGNOSIS.*—Undetermined. Parents returned with child on December 12 stating that he had done well up to two days before when fever went to 100°F. On day before admission fever was 103°F. Only complaint frequency of urination for four days. This was attributed to urotropin. *PHYSICAL FINDINGS.*—Same as before. No increase in size of liver or spleen but some abdominal distention. Murmur still present but softer in character. Greenish-yellow discoloration of skin had disappeared. Blood presure 110/60; temperature 102°F.; pulse 85.

LABORATORY.—Urine negative except for few fresh blood cells. Blood: Hemoglobin 62 per cent; erythrocytes 3,730,000; reticulocytes 0.25 per cent; leukocytes 8,100; polymorphonuclears 68 per cent; lymphocytes 32 per cent; no malaria found. Agglutination tests negative for typhoid, paratyphoid "A", paratyphoid "B", and undulant fever. Blood culture negative. Icterus index 5; van den Bergh 5.2 mg. (indirect); fragility of erythrocytes: maximal resistance 0.40 per cent, minimal resistance 0.48 per cent. Repeated blood examinations gave similar results. Examinations for Borrelia recurrentis and Leishman-Donovan bodies negative. Cystoscopic examination negative. Specimens of urine from pelves of kidneys normal except for growth in cultures of B. fecalis alcaligenes.

From the stool was twice isolated a motile Gram-negative bacillus giving fermentation reactions of B. typhoid but producing indol. Agglutination test with known typhoid serum were positive in 1-20 dilutions but not in higher dilutions. Cultures are being carried along in the laboratory for further agglutination tests as sometimes freshly isolated cultures of typhoid and similar organisms are not easily agglutinable. *SUBSEQUENT.*—Child remained in hospital through Dec. 20. Temperature ranged from 97°F to 104.4°F. with morning remissions some days. Pulse 90 to 120 and higher with fever and down to 90 with normal temperature. Roentgen ray therapy to spleen on three successive days using 9 inch spark gap 5 mil. F.S.D. 40, filter Al. VI, time 15 minutes, alternating front, lateral back. One lextron tablet three times day; two drachms chlorine water, three times day in grape juice; mineral oil. Typhoid diet.

Returned to clinic January 2, with history of no fever since discharge, appetite better than for eight months, generally greatly improved; has gained four pounds in weight in two weeks.

PHYSICAL EXAMINATION. — Temperature 98.6°F.; blood pressure 110/60; pulse 82. Spleen palpated only on deep inspiration and liver one finger below costal margin. No abdominal distention. Color greatly improved. Urine normal. Blood: Hemoglobin 82 per cent; erythrocytes 4,770,000; leukocytes 9,300; polymorphonuclears 62 per cent, lymphocytes 38 per cent. No malaria found. Continued rest in bed, diet, lextron and chlorine water.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

FEBRUARY 1 Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

FEBRUARY 4 Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.

FEBRUARY 6 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

FEBRUARY 6 Mercy Hospital Staff, 8 P. M.

FEBRUARY 6 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

FEBRUARY 8 Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

FEBRUARY 8 French Hospital Staff, 8 P. M.

FEBRUARY 11 ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

FEBRUARY 13 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

FEBRUARY 13 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

FEBRUARY 13 Touro Infirmary Staff, 8 P. M.

FEBRUARY 15 Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.

FEBRUARY 15 I. C .R. R. Hospital 12 Noon.

FEBRUARY 15 Society for Experimental Biology and Medicine, Richardson Memorial Building 8:15 P. M.

FEBRUARY 18 Hotel Dieu Staff, 8 P. M.

FEBRUARY 19 Charity Hospital Medical Staff, 8 P. M.

FEBRUARY 20 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

FEBRUARY 20 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

FEBRUARY 20 Charity Hospital Surgical Staff, 8 P. M.

FEBRUARY 21 Eye, Ear, Nose and Throat Club, 8 P. M.

FEBRUARY 25 ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.

FEBRUARY 27 Clinico-Pathological Conference, Touro Infirmary, 10:30 to 11:30 A. M.

FEBRUARY 27 Physiology-Pharmacology Journal Club, Richardson Memorial, 4 to 6 P. M.

During January the Society held three meetings; the annual Installation Meeting, a special meeting and a regular scientific meeting.

January 14 the following Officers for 1935 were installed:

President—Dr. Val H. Fuchs.
First Vice-President—Dr. Frederick L. Fenno.
Second Vice-President—Dr. James D. Rives.
Third Vice-President—Dr. Edwin H. Lawson.
Secretary—Dr. H. B. Alsobrook.
Treasurer—Dr. Shirley C. Lyons.
Librarian—Dr. Alton Ochsner.
Additional Members Board of Directors
Dr. Andrew V. Friedrichs, Dr. Foster M. Johns, Dr. Waldemar R. Metz.

Medical Director L. L. Lumsden of the United States Public Health Service delivered the Annual Oration, and had for his subject "Tuberculosis."

A smoker was held after the meeting and a large crowd enjoyed refreshments. Dr. Lucien Landry entertained with many of his humorous jokes and dialects.

January 21 a special meeting was held to hear Dr. W. R. MacAusland of Boston read a paper on Mobilization of Ankylosed Joints by Arthroplasty. Moving pictures of Arthroplasties of the Knee and Elbow were also shown.

January 28 a regular scientific meeting was held. The following program was presented:

Surgical Complications of Ringworm of the Feet.
By:.....Dr. J. A. Colclough
Discussed by Dr. T. H. Oliphant.

Causes of Uterine Bleeding.
By:.....Dr. J. Thornwell Witherspoon
Discussed by Dr. Hilliard E. Miller.

The Science and Art of Obstetrics.
By:.....De Lee. Courtesy Petrologar Company

The annual reports of the officers and special and standing committees for 1935 were read at this meeting.

We regret to report that Dr. Seward H. Wills, an Active Member, and Dr. J. A. Gorman, an Associate Member, resigned from membership.

Dr. J. C. Derbofen died January 11, 1935.

The following doctors attended the recent meeting of the Southern Surgical Association: Drs. G. C. Anderson, I. M. Gage, Lucien Landry, Rudolph Matas, C. Jeff Miller, Alton Ochsner and Curtis H. Tyrone.

The next meeting of the Louisiana State Medical Society will be held in New Orleans, April 29 and 30 and May 1, 1935, with headquarters at the Roosevelt Hotel.

We are planning to have a large meeting, and we invite you to make arrangements to attend.

If you are interested in scientific exhibits we would suggest that you communicate with the Chairman of the Scientific Exhibits Committee, Dr. Ambrose H. Storck, 1430 Tulane Avenue.

Dr. Walter Levy was appointed head of the Obstetrical Staff at Touro Infirmary.

TREASURER'S REPORT

ACTUAL BOOK BALANCE 11/30/34	$ 640.10
December credits	1,412.84
Total credits	$2,052.94
December expenditures	$1,208.08
ACTUAL BOOK BALANCE: 12/31/34	$ 844.86

LIBRARIAN'S REPORT

During Decemer, 66 books have been added to the Library, of which 29 were received by binding, 17 from the New Orleans Medical and Surgical Journal, 17 by purchase and 3 by gift. New titles of recent date are listed below.

Material has been collected by members of the staff on the following subjects:

Toxic effects of marsh gas or fire damp.
Agranulocytosis.
History of Tulane Medical School and personal notes on founders, benefactors and deans.
Role of liver in carbohydrate metabolism.
Congenital pyloric stenosis.
Diseases of the pancreas.
Treatment of polyomyelitis.
Insulin in the treatment of non-diabetic diseases.
Polycystic kidney.
Peri-tonsillar infections.
Non-surgical abdominal pain.
Lumbar puncture in intracranial hypertension.
Psoriasis.

In this connection, a brief resume of the work of the Library during 1934 is in order. In this period, 632 books have been added to the Library. A table showing the source from which we have received them and a comparison with a similar record for 1933 shows:

	Binding	Gift	Journal	Purchase	Total
1934	284	210	87	51	632
1933	370	679	130	63	1242

The lower numer of volumes received by binding is of course due to our decreased income. Only absolutely essential binding can be cared for. Likewise we have refrained from checking lists of gift books offered by other libraries, because of

mounting express charges for which we could not be responsible this year.

There are on December 31, 1934,—20,313 volumes in our Library. We receive currently by subscription and by gift, approximately 250 medical periodicals.

The reference service given in this Library to the profession by members of the staff, is worthy of particular mention, since this is a field entirely omitted in many medical libraries,—doctors being required to gather all their own references. Our Library staff during 1934 has collected material on 207 different subjects, at the particular request of physicians,—all of this in addition to calls for specific titles and for needs which could be filled at once by books or by use of the card catalog.

This Library and that of Tulane University School of Medicine have circulated to **doctors alone** 8,746 volumes, during 1934, or approximately 17 to each member of the Society. It should be noted that books are taken from the Library by doctors for two weeks, subject to a renewal of that period in case the book has not been called for by another. Almost every book circulated is in use away from the Library from seven to 21 days. This is entirely exclusive of books loaned to students for overnight use. (9,451 volumes for 1934). It is also exclusive of the great use of material in the Library Reading Rooms. The total number of books loaned during 1934 to students and doctors was 18,197.

Miss Marshall represented your Library at the annual session of the Medical Library Association, for the eighth consecutive year, thereby being enabled to establish interlibrary relations of inestimable value to our own Library.

A financial statement of receipts and expenditures for 1935 accompanies this report. This will show the total income of the Library to have been only $1,322.65 of which $116.57 was the balance of January 1, 1934, and $100 was owing from the General Fund in 1933 and paid in 1934. The actual accruing income of the Library for 1934 was therefore only $1,106.08,—less than in any year since the reorganization of the Library began, in the fall of 1920.

Our experience has been that of libraries all over the country, the past year has seen the most intensive use of the Library and its resources in the period of smallest income.

NEW BOOKS

Fracastoro—Sinister Shepherd. 1934.

Committee on Graduate Nursing Schools—Nursing Schools, Today and Tomorrow. 1934.

Johns, Ethel—Activity Analysis of Nursing. 1934.

Moennig, H. O.—Veterinary Helminthology and Entomology. 1934.

Zocchio, J. B.—Tese' de doutoramento. 1934.

American Surgical Association — Transactions. 1934.

Matsner, E. M.—Technique of Contraception. 2nd. ed. 1934.

Polevski, J.—The Heart Visible. 1934.

Turner, Philip—Aids to Osteology. 1934.

Pederson, V. C.—Nature's Way. 1934.

Harrington, Milton—Wish-hunting in the Unconscious. 1934.

Gibb, W. T.—Minor Surgery in General Practice. 1934.

Fischel, M. K.—Spastic Child. 1934.

Meigs, J. V.—Tumors of the Female Pelvic Organs. 1934.

Podalsky, Edward—Medicine Marches On. 1934.

Clendenning, Logan—Laboratory Note Book Methods in Teaching. 1934.

Hawaii Territorial Medical Association Transactions. 1934.

American Otological Society — Transactions. 1934.

Davis, G. G.—Applied Anatomy. 1934.

May, C. H.—Manual of Diseases of the Eye. 1934.

Pickett-Thomson Research Laboratories—Influenza. Pt. 2. 1934.

H. B. ALSOBROOK, M. D.,
Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

LIST OF COMMITTEES
ARRANGEMENTS FOR MEETING
LOUISIANA STATE MEDICAL SOCIETY
APRIL 30—MAY 1, 1935

ADVISORY COMMITTEE—Dr. H. B. Alsobrook, Chairman; Drs. Frank J. Chalaron, H. B. Gessner, W. H. Knolle, E. L. Leckert, Leon J. Menville, Waldemar R. Metz, and Wm. H. Seemann.

BADGES—Dr. H. F. Brewster, Chairman; Drs. Chas. A. Bahn, Geo. E. Barnes, L. J. Hanckes, Frank L. Loria and J. W. Reddoch.

BANQUETS—Dr. A. V. Friedrichs, Chairman; Drs. M. P. H. Bowden, T. E. Clements, Max M. Green, M. David Haspel, I. W. Kaplan, Aldea Maher, P. A. Kibbe, J. G. Stulb, H. Ashton Thomas and David R. Womack.

CONVENTION CLINICS—Dr. H. W. Kostmayer, Chairman; Drs. C. Grenes Cole, I. M. Gage, Maurice J. Gelpi, W. H. Harris, J. H. Musser and Robert Bernhard.

COMMERCIAL EXHIBITS—Dr. J. T. Nix, Chairman; Drs. Sydney Jacobs, Earl C. Smith, M. Lyon Stadiem, D. M. Stewart, Marcy J. Lyons and H. W. E. Walther.

DECORATIONS—Dr. Foster M. Johns, Chairman; Drs. E. B. Gill, R. H. Fisher, Monte F. Meyer, J. Kelly Stone and N. J. Tessitore.

ENTERTAINMENT—Dr. C. L. Peacock, Chairman; Drs. R. S. Crichlow, Boni J. DeLaureal, Manuel Gardberg, Geo. D. Feldner, John B. Gooch, Robert F. Sharp and Edwin L. Zander.

FINANCE—Dr. John A. Lanford, Chairman; Drs. Edgar Burns, E. Z. Browne, Arthur Caire, Jr., J. A. Colclough and Allan Eustis.

GOLF—Dr. Edwin H. Lawson, Chairman; Drs. Ph. C. DeVerges, L. A. Fortier, Julian Lombard and Warren L. Rosen.

HOTELS—Dr. W. R. Hardy, Chairman; Drs. J. N. Ane, J. S. Couret, Lily Dismuke, John F. Oakley and R. M. Willoughby.

LANTERNS—Dr. T. T. Gately, Chairman; Drs. J. Browne Larose, F. R. Gomila, F. E. LeJeune, D. V. Longo and Walter J. Otis.

LOCATIONS—Dr. Spencer B. McNair, Chairman; Drs. Theo. F. Kirn, J .E. Lindner, John T. Sanders, J. F. Sicomo and Edmond Souchon.

LUNCHEONS—Dr. Paul G. Lacroix, Chairman; Drs. W. R. Brewster, J. J. Baron, D. C. Browne, Frank L. Cato and D. J. Farley.

PUBLICITY—Dr T. B. Sellers, Chairman; Drs. J. E. Bailey, Ansel Caine, E. A. Ficklen, M. W. Miller and P. L. Querens.

SCIENTIFIC EXHIBITS—Dr. Ambrose H. Storck, Chairman; Drs. Wilmer Baker, Wm. B. Clark, E. E. Allgeyer, M. O. Miller, W. H. Perkins, Emmerich von Haam and Garland Walls.

SIGNS—Dr. Chas. L. Cox, Chairman; Maurice Lescale, Anees Mogabgab, H. D. Ogden and Jos. P. Palermo.

TRANSPORTATION—Dr. C. J. Brown, Chairman; Drs. Lucy S. Hill, Suzanne Schaefer and Wm. A. Wagner.

WOMEN PHYSICIANS — Dr. Rena Crawford, Chairman; Drs. Elizabeth Bass, Florence R. Gilpin, Katherine Havard, Etta P. McCormick, Maud Loeber and G. R. Williamson.

REGISTRATION—Dr. Alton Ochsner, Chairman; Drs. B. G. Efron, R. L. Gordon, J. E. Landry, W. E. Levy and T. H. Oliphant.

SCIENTIFIC EXHIBITS

Dr. Ambrose Storck, Chairman of the Committee on Scientific Exhibits, 914 Pere Marquette Building, New Orleans, is anxious to hear from any individual, organization, or group, who may have an exhibit of scientific interest to be used for the Annual Meeting of the Louisiana State Medical Society on April 30 and May 1.

1935 OFFICERS OF PARISH SOCIETIES

The following Parish Medical Societies have elected officers for 1935:

Calcasieu Parish—President, Dr. L. A. Hebert, Lake Charles; Vice-President, Dr. B. N. Sewell, Lake Charles; Secretary-Treasurer, Dr. Eleanor Cook, Lake Charles.

Claiborne Parish—President, Dr. L. T. Waller, Haynesville; Vice-President, Dr. J. A. Wilkinson, Homer; Secretary-Treasurer, Dr. H. R. Marlatt, Homer; Delegate, Dr. E. A. Campbell, Homer; Alternate, Dr. H. R. Marlatt, Homer.

DeSoto Parish—President, H. P. Curtis, Mansfield; Vice-President, Dr. B. P. Smith, Jr., Keatchie; Secretary-Treasurer, Dr. W. G. Jones, Mansfield; Delegate, Dr. R. A. Tharp, Mansfield; Alternate, Dr. B. P. Smith, Jr., Keatchie.

Jackson-Lincoln Bi-Parish—President, Dr. Wm. M. McBride, Hodge; Vice-President, Dr. Thos. A. Dekle, Jonesboro; Secretary-Treasurer, Dr. W. S. Rutledge, Ruston; Delegate, Dr. J. E. Crawford, Ruston; Alternate, Dr. M. T. Green, Ruston.

Ouachita Parish—President, Dr. I. J. Wolff; Vice-President, Dr. H. E. Guerriero; Secretary-Treasurer, Dr. H. S. Coon; Delegates, Dr. John Snelling and Dr. Geo. Wright; Alternates, Dr. Geo. Snellings and Dr. C. P. Gray, Jr.; all of Monroe.

Pointe Coupee Parish—President, Dr. M. O. Becnel, New Roads; Vice-President, Dr. J. S. Branch, Lettsworth; Secretary-Treasurer, Dr. F. F. Rougon, New Roads; Delegate, Dr. R. McG. Carruth, New Roads; Alternate, Dr. J. O. St. Dizier, Walls.

Rapides Parish—President, Dr. D. B. Barber, Alexandria; First Vice-President, Dr. M. B. Pearce, Alexandria; Second Vice-President, Dr. D. V. Donaldson, Dry Prong; Secretary-Treasurer, Dr. N. T. Simmonds, Alexandria; Delegates, Dr. P. K. Rand, Dr. D. C. McBride and Dr. M. H. Foster; all of Alexandria.

Vernon Parish—President, Dr J. F. Smith, Leesville; Vice-President, Dr. W. T. Franklin, Anacoco; Secretary-Treasurer, Dr. D. O. Willis, Leesville; Delegate, Dr. D. O. Willis, Leesville; Alternate, Dr. F. P. Jones, Leesville.

SECOND DISTRICT MEDICAL SOCIETY

The meeting of the Second District Medical Society was held at the Metairie Golf Club on Thursday, January 17, 1935, at 7:30 p. m. The guest speaker for the evening was Dr. Edwin H. Lawson, who spoke on "Cancer: Its Life History and Practical Measures of Control."

TRI-PARISH MEDICAL SOCIETY

The meeting of the Tri-Parish Medical Society was held in Lake Providence on January 8, 1935. Following a luncheon an interesting scientific program was enjoyed by the members of the Society. Dr. Pierre Robert of Vicksburg, Mississippi, was the guest essayist for the evening.

At the annual meeting held in Tallulah on Decem-

ber 4, 1934, the following officers of the Society were elected:

Dr. B. L. Bailey, President.

Dr. J. P. Davis, Vice-President from E. Carroll.

Dr. D. W. Kelly, Vice-President from W. Carroll.

Dr. E. O. Edgerton, Vice-President from Madison.

Dr. G. S. Hopkins, Secretary-Treasurer.

Dr. G. W. Gaines of Tallulah was elected delegate to the next meeting of the Louisiana State Medical Society with Dr. E. S. Freeman as alternate delegate.

FIFTH DISTRICT MEDICAL SOCIETY

The Fifth District Medical Society held its semi-annual meeting at Hotel Virginia, Monroe, La., Dec. 7, 1934. There were about seventy-five members and guests present.

Scientific Program

1. Dr. Brooks C. Garrett, Shreveport, La.—Pyloric Stenosis in Infancy.
2. Dr. Seale Harris, Birmingham, Ala.—Hyperinsulinism.
3. Dr. Ralph Talbot, Monroe, La.—Infectious Diarrhea in Infancy and Childhood.

Officers Elected

President—Dr. John G. Snellings, Monroe.

Vice-President—Dr. H. C. Chambers, Rayville.

Sec.-treas.—Dr. C. Prentice Gray, Jr., Monroe.

Delegate—Dr. C. C. Thompson, Delhi.

Alternate—Dr. D. I. Hirsch, Monroe.

Motion by Dr. J. E. Walsworth of Monroe that the Society have an annual oration on Surgery to be known as the "Cosby Oration," in honor of the late Dr. O. W. Cosby, who was instrumental in the organization of the Fifth District Medical Society, and that the Secretary select a suitable man to give this oration at the spring meeting. The motion was seconded and passed.

After the scientific program and election of officers the society adjourned to the Banquet Hall of the Hotel Virginia where dinner was served to the members and guests. There being no further business the meeting adjourned.

Courtland Prentice Gray, Jr.,
Secretary.

ST. TAMMANY PARISH MEDICAL SOCIETY

The St. Tammany Parish Medical Society met at the Southern Hotel, Friday night, January 11th, for the purpose of installing their officers-elect for the year 1935 and to partake of the fruits of the Refreshment Committee's labors. The Society was honored with the presence of Dr. Marcy J. Lyons, First Vice-President of the State Medical Society and with Dr. P. T. Talbot, Secretary and Treasurer of the State Medical Society.

After reading the minutes and clearing away a little miscellaneous business, the membership repaired to the Banquet Hall of the Southern Hotel where they enjoyed themselves. I don't know where the champagne came from but it was there. Somebody said Dr. Frank Young could tell us, but who cares. It was good, duly appreciated and "that's that."

Meeting adjourned to meet February 8th, Southern Hotel.

H. D. Bulloch, M. D.
Secretary.

Carl Young, M. D.,
President.

U. S. CIVIL SERVICE EXAMINATION

The United States Civil Service Commission has announced an open competitive examination as follows:

Junior Medical Officer (Interne)
St. Elizabeths Hospital.

Applications for the position of Junior Medical Officer (Interne) at St. Elizabeth Hospital, Washington, D. C., must be on file with the Manager of the Fourth U. S. Civil Service District, Washington, D. C., not later than February 18, 1935.

Two types of interneship are offered, as follows:

(a) An accredited interneship of two years (American Medical Association classification 1), consisting of a rotating service of four months of surgery, four months of acute medical service, four months of chronic medical service, six weeks of obstetrics (affiliation), six weeks of pediatrics (affiliation), three months of general laboratory work, and six months of psychiatry.

(b) A postgraduate interneship of one year in psychiatry.

Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city which has a post office of the first or the second class, or from the United States Civil Service Commission, Washington, D. C.

NEWS ITEMS

The publishing firm of Lea and Febiger will celebrate the one hundred and fiftieth anniversary of the founding of their firm in 1785, on January 25, 1935. This is truly a remarkable record. There are few firms in this country who have existed unchanged for such a long period of time. It might be of moment to record the fact that the house journal, The American Journal of Medical Science, has been in existence over the one hundred years. Its actual founding antedates any other medical journal published in Egnlish. The London Lancet is two years younger but claims to be the oldest medical journal in English. The name of the American Journal of Medical Science has been changed several times, and hence the English hold that it is not the same journal. However, it has been published by the same family for one hundred and some odd years and certainly

justifiably can claim the honor of being the oldest of English or American journals.

Acting Assistant Surgeon Frank A. Norwood has been relieved from duty at St. Louis, Mo., and assigned to duty at the Marine Hospital, New Orleans, La.

SURGEONS TO MEET IN JACKSONVILLE

The Southeastern Surgical Congress, through its secretary, Dr. B. T. Beasley, announces the sixth annual assembly of the Congress which will be held in Jacksonville, Florida, March 11, 12 and 13, 1935. The Congress has met previously in Atlanta, Birmingham and Nashville .

The states composing the Congress are Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

Some of the most distinguished surgeons in the country representing the different surgical specialties have been invited to appear on the program. A partial list of those who have already accepted places is as follows: Doctors Walter C. Alvarez, Perry Brombery, Hugh Cabot, Willis C. Campbell, George W. Crile, John F. Erdmann, Paul Flothow, Ralph Green, Arthur Hertzler, C. Jeff Miller, Alton Ochsner, J. C. Patterson, J. Knox Simpson, J. W. Snyder and W. A. Weldon. More than twenty others will be listed when the program is completed.

For information address Dr. B. T. Beasley, Secretary-treasurer, 1019 Doctors Building, Atlanta, Georgia.

INFECTITIOUS DISEASES IN LOUISIANA

Dr. J. A. O'Hara, Epidemiologist for the State of Louisiana, has furnished us with the weekly morbidity reports for the State of Louisiana, which contain the following summarized information. For the week ending December 22, pneumonia led all other reportable diseases, there being 149 such cases listed. This was followed by diphtheria with 34 cases, while the other diseases reported in numbers of more than ten were 32 cases of pulmonary tuberculosis, 29 of cancer, 25 of scarlet fever, 17 each of measles and typhoid fever, and 12 of syphilis. Six of the cases of typhoid fever were reported from Orleans Parish; 3 of them were imported. The other cases were distributed one to each of the various parishes throughout the State who reported this disease. Ascension Parish reported 6 cases of diphtheria. Of the rarer diseases a case of poliomyelitis was reported from Washington Parish, a case of smallpox from Rapides, and one of rabies from Tensas. During Christmas week, which officially ended December 29, pneumonia again led all other reportable diseases, there being 55 cases listed. Next on the list comes malaria with 46 cases, followed by tularemia with 45, 31 of cancer, 23 of measles, 22 of scarlet fever, 21 of gonorrhea, 19 each of diphtheria and syphilis, 12 of chickenpox, and 11 of typhoid fever. Four cases of smallpox were reported this week, and one of undulant fever. For the week ending January 5, there is still further evidence that pneumonia weather was present in Louisiana the past few weeks. This disease led the other reportable diseases, there being 49 cases recorded, followed by 41 of scarlet fever, 34 of diphtheria, 29 of measles, 26 of syphilis, 22 of gonorrhea, 21 of cancer, 18 of pulmonary tuberculosis, and 11 of typhoid fever. Two cases of smallpox were reported, as were 2 of poliomyelitis and one case of anthrax and one of typhus. For the second week of the year ending January 12, syphilis had re-obtained its usual position as the most frequent of reportable diseases, there being 65 cases reported in this week, followed by 56 cases of measles, 49 of diphtheria, 48 of scarlet fever, 32 of chickenpox, 31 of pneumonia, 26 of tuberculosis, 20 of gonorrhea, 16 of influenza, 13 of malaria, 12 each of cancer and typhoid fever. Of the unusual contagious diseases, one case of smallpox was reported and one of poliomyelitis. Two instances of tularemia were also reported.

HEALTH OF NEW ORLEANS

The Department of Commerce, Bureau of Census, reports that for the week ending December 15 there were reported 198 deaths in New Orleans, of which 121 were in the white and 77 in the colored population. The death rate for the group as a whole was 21.4, for the white 18.5, and for the colored 28.8. The infant mortality rate for this week was somewhat elevated. For the next week ending December 22, 197 citizens of New Orleans died, one less than the previous week. The distribution of these deaths was practically the same in the two races, and of course the death rate was virtually unchanged from the previous week. The infant mortality this week was reduced to 95. For the week ending December 29, the death rate was 18.6, for the white 15.9, and for the colored 25.4. These figures were obtained from the total deaths of 172, of which 104 were in the white population and 68 in the negro. For the beginning of the new year, the total number of deaths as given for the week which ended January 5 was reduced over the figures of a few previous weeks. There were 164 deaths, divided 97 white and 67 colored. The death rate for the whole city population was 17.8, for the white section 14.8, and for the negro 25.0. The infant mortality rate was 89, materially increased by the colored rate of 142.

RESOLUTION ,

Adopted at the regular meeting of the Shreveport Medical Society, January 2, 1935

WHEREAS, on December 23, 1934, our Divine Heavenly Father saw fit to call from this earth Dr. Allyn B. Moise, one of our most beloved and esteemed members; and,

WHEREAS, we most humbly bow to the will of Him "Who doeth all things well," but our hearts are made sad at the thought of giving him up; and,

WHEREAS, Dr. Moise for more than twenty-one years was a member of the Shreveport Medical Society, always active and alert to everything that was conducive to the good of the Society; and,

WHEREAS, the members of this Society learned to respect and covet his professional opinion, and to seek his aid and assistance in cases coming under his specialty; and,

WHEREAS, this Society will miss his presence and wise council in our meetings and around the institutions where we were accustomed to seeing him, yet his memory will be held sacred and his friendship cherished as one whom we could always depend upon and one whose ethical conduct was never doubted.

THEREFORE, be it resolved, that the Shreveport Medical Society in the passing of Dr. Moise lost one of its most valued and beloved members, and that we extend to his family and relatives our deepest and sincere sympathy and trust that the upright and beautiful life he lived will temper the grief which they suffer.

BE IT RESOLVED, that a copy of these resolutions be spread upon our minutes and a copy sent to his family and one to the Tri-State Medical Journal, The New Orleans Medical Journal and to the daily press of this City.

RESOLUTION ON THE DEATH OF DR. JOHN LUTHER KELLY

WHEREAS, it has pleased Almighty God in His infinite wisdom to remove from our midst Doctor John Luther Kelly; and

WHEREAS, Doctor Kelly has given the greater part of his life to alleviating suffering humanity, both as a general practitioner and as a specialist, and

WHEREAS, he was essentially a home man, devoted to his family, never too tired to assist those in need.

NOW, therefore, be it resolved that we, the members of the Tri-Parish Medical Society feel keenly his loss and convey to his widow and son our heartfelt sympathy and condolence;

BE it further resolved, that these resolutions be spread on the minutes of this Society and copies be sent to the family and to the New Orleans Medical and Surgical Journal.

Passed and signed this fourth day of December, 1934.

WM. K. EVANS, Vice-President,
G. SANDERS HOPKINS, Secretary,
WILLIAM H. HAMLEY, Past President.

MOISE, ALLYN B., Shreveport: Born in 1877. Graduated from Tulane School of Medicine in 1903. Dr. Moise was a member of the American Medical Association, Louisiana State Medical Society, the Shreveport Medical Society, American Academy of Ophthalmology and Otolaryngology, American Board of Otolaryngology, and the American College of Surgeons. Dr. Moise died in Shreveport on December 23, 1934.

PIERSON, CLARENCE, Alexandria: Born in 1868. Graduated from the Tulane School of Medicine in 1894. He was a member of the American Medical Association, Louisiana State Medical Society, Rapides Parish Medical Society, and American Psychiatric Association. Dr. Pierson was the first superintendent of the Central Louisiana Hospital at Pineville. He died in New Orleans on December 27, 1934. The loss of Dr. Pierson will fall heavily upon the Louisiana State Medical Society. Always an active member of the organization, he was honored in 1917 by being made President of the organization.

A CORRECTION

The title of the article of Dr. R. L. Gordon, appearing in the January number should have been "Renal Tumor" instead of "Renal Kidney."

WOMAN'S AUXILIARY TO LOUISIANA STATE MEDICAL SOCIETY

President: Mrs. T. Henry Watkins, Lake Charles.

President-elec: Mrs. Hermann B. Gessner, New Orleans.

Immediate Past President: Mrs. John H. Musser, New Orleans.

Chairman Press and Publicity: Mrs. Robert T. Lucas, Shreveport.

ORLEANS PARISH

The beginning of 1935 finds us all eager to start off on the right path toward a happy and healthy year, and with this in mind, our Committee on Health Education hasn't even given us time to yawn and stretch our arms in the dawn of the New Year, when in the mails we find a nice, double post-card, one side asking if we will not promise to have a thorough medical examination of ourselves made, and the other side is to be returned to the Committee telling when this ex-

amination was made. Thus, the work of the committee on Periodic Health Examinations begins, along with 1935, and hopes that with the end of another year everyone will have benefited by these examinations.

Mrs. Jules Myron Davidson has formulated plans for a benefit party to raise funds for the indigent physicians. Mrs. Davidson has been successful in again procuring Rabbi Louis Binstock to give a book review. This proved to be such a delightful and so well-attended affair last year that there have been many requests for a repetition. Rabbi Binstock has chosen for his review Stark Young's "So Red The Rose," a story of the South. The popularity of Rabbi Binstock is such that we are hoping for even a larger audience than before, for when the afternoon's entertainment is over, one is really reluctant to leave. This party will be given the early part of April.

Next month we again plan to have our annual Mother's Party and since St. Valentine's Day falls the day after our meeting, we are going to have a Valentine Party, for what would be more appropriate than celebrating the birthday of the Saint of Love with the most loved and beloved person in the world?—the Gift of God—M O T H E R !

Alma W. Feldner, Publicity Chainman.

JEFFERSON DAVIS PARISH

Because of the death of the mother of Mrs. R. R. Arceneaux, president of the Jeff Davis Auxiliary, there was no meeting of that group in January. This column expresses to Mrs. Arceneuax the sympathy of the Auxiliary in her sorrow.

SHREVEPORT

Mrs. W. R. Harwell, chairman of the Preventorium work for the Auxiliary wrote the following account of her fall and winter activities, characteristically leaving out all the drudgery and making no reference to her own work. However, your C. of P. and P. feels press-and-publicity-bound to point out Mrs. Harwell as a likely candidate for Auxiliarydom's most perfect chairman. She is not the kind that spends her time "sitting on" committees. You know what I mean. All of you have been on committees that were "sat on." She works herself and shares the work. Work, I say, W-O-R-K. And she was never known to grab for glory. She fails to mention in her article how often she makes the drive out to the Preventorium herself, how many telephone calls she has, how many hours she spends at board meetings, how many miles she trudges around town comparing prices and quality and crotch seams of the available coveralls for children, how she tests outing flannel for shrinkage and stretchage, how she chooses one pajama pattern that will fit all seventeen of the models, how she picks the seamstress to sew for the seventeen. And then smiles. Here is her article:

The Woman's Auxiliary to the Shreveport Medical Society has as its major project the children of the Preventorium at the Pines Sanatorium. Many duties aside from sponsoring the school work come to the members of the Auxiliary.

At the beginning of each fiscal year the Auxiliary is divided into twelve groups: Each group is assigned a month during which they plan fun and entertainment for the children. They provide also for other needs which are not so entertaining, such as visits to the dentist when needed. That means a fourteen mile drive out to the Pines and then back to town and "standing by" while the children are treated by the dentists, who are glad to give their services.

All birthdays during the month are celebrated jointly with birthday cakes baked and decorated by the women of the committee. At the time this is done a party is given for all the other children. In October there was a Hallowe'en party with every kind of favor and decoration. There was ice cream and the birthday cakes too.

A Thanksgiving party in November was given, with the committee acting the story of the first Thanksgiving and playing games. In December the Auxiliary made the children warm and happy by giving each child a bright colored all-wool sweater as a Christmas gift. The monthly committee observed the birthdays and gave all the children their annual picture show party. The group for January entertained with story telling and games and the usual cakes and ice cream.

"Hygeia" is placed in the Preventorium library as a gift from the Auxiliary. A book shower was given during the fall with many useful and interesting books being added to their library.

The latest meeting of the Shreveport Auxiliary was a program tea in the home of Mrs. J. E. Knighton. Mrs. Harold Quinn reviewed "Mary Peters" by Mary Ellen Chase in a delightfully animated and revealing vein. Dr. J. E. Knighton spoke on "The Significance of the Periodic Health Examination," later opening the meeting for discussion and encouraging the very genuine interest of the members in the subject.

Mrs. L. Wailes Gorton, president, entertained the executive board of the Auxiliary at luncheon preceding the January board meeting.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

CALENDAR

SOCIETY MEETINGS

ALCORN COUNTY MEDICAL SOCIETY: Third Thursday of each month. Club Room of Ladren Hotel, Clarksdale, 7 P. M.

ADAMS COUNTY MEDICAL SOCIETY: Third Tuesday of each month, Natchez Hospital, 7 P. M.

CENTRAL MEDICAL SOCIETY: First Tuesday of each month, Robert E. Lee Hotel, Jackson, 7 P. M.

CHICKASAW COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

CLAIBORNE COUNTY MEDICAL SOCIETY.

CLARKSDALE AND SIX COUNTIES MEDICAL SOCIETY: Third Wednesday in March and fourth Wednesday in Novmber, Clarksdale, 2 P. M.

CLARKE-WAYNE MEDICAL SOCIETY: No regular meetings except for election of officers. Called meetings for special sessions.

COAHOMA COUNTY MEDICAL SOCIETY: Second Wednesday of each month, Clarksdale Hospital.

DELTA MEDICAL SOCIETY: Second Wednesday of April and November, 2 P. M. Next meeting, Greenwood, April 10, 1935.

DESOTO COUNTY MEDICAL SOCIETY: First Monday of January, April, July and October, Hernando, 10 A. M.

EAST MISSISSIPPI MEDICAL SOCIETY: First Thursday after the first Sunday of June and December, Meridian, 3 P. M.

HARRISON COUNTY MEDICAL SOCIETY: First Wednesday of each month, King's Daughters' Hospital, Gulfport or Biloxi Hospital, Biloxi, 7:30 P. M.

HOMOCHITTO MEDICAL SOCIETY: Second Thursday of January, March, July and October, Natchez, 2 P. M.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY: Second Tuesday of each month, Elks Club, Vicksburg, 7 P. M.

JACKSON COUNTY MEDICAL SOCIETY: Second Thursday of March, June, September and December, Jackson County Hospital, Pascagoula, 7:30 P. M.

MONROE COUNTY MEDICAL SOCIETY: First Monday of each month, alternates between Aberdeen and Amory.

NEWTON COUNTY MEDICAL SOCIETY: First Thursday of each month, 2 P. M., Decatur.

NORTH MISSISSIPPI MEDICAL SOCIETY: First Wednesday of October, January, April and July.

NORTHEAST MISSISSIPPI THIRTEEN COUNTIES MEDICAL SOCIETY: Third Tuesday of March, June, September and December, 1 P. M.

PIKE COUNTY MEDICAL SOCIETY: First Thursday of each month. McComb, 7 P. M.

PONTOTOC COUNTY MEDICAL SOCIETY: First Tuesday of each month, 2 P. M.

SOUTH MISSISSIPPI MEDICAL SOCIETY: Second Thursday in September, December, March and June, alternates between Hattiesburg and Laurel, 3 P. PM.

TATE COUNTY MEDICAL SOCIETY: Third Wednesday of each month, Senatobia, 8 P. M.

TRI-COUNTY MEDICAL SOCIETY: Second Tuesday in March, June, September and December, Wesson, Tylertown, Monticello or Brookhaven, 12:30 P. M.

WEBSTER COUNTY MEDICAL SOCIETY: Last Thursday of each month, Houston Hospital, Houston.

WINONA DISTRICT MEDICAL SOCIETY: March 19, Durant.

MISSISSIPPI STATE HOSPITAL ASSOCIATION: Biloxi, May 13, 1935.

MISSISSIPPI STATE MEDICAL ASSOCIATION: Biloxi, May 14, 15, 16, 1935.

NARCOTIC DRUGS

Dr. E. C. Parker, President, Mississippi State Medical Association, has received the following letter from Dr. William C. Woodward, Director of the Bureau of Legal Medicine and Legislation of the American Medical Association in regard to a federal licensing system to control the professional use by physicians of narcotic drugs. Dr. Parker would appreciate comments and opinions at the earliest possible date. The letter follows:

"The medical profession has recently been threatened through the public press with a federal licensing system to control the professional use by physicians of opium and coca leaves and of compounds and derivatives of them, commonly referred to in this connection as 'narcotic drugs'.

"Now a physician authorized by a State to practice medicine can register under the Harrison Narcotic Act as a matter of right and professionally use narcotic drugs, and the Federal Government cannot suspend or revoke his resignation so long as his state license to practice medicine continues in force.

"Under the threatened federal licensing system, a federal officer or board would determine who may and who may not register under the Harrison Narcotic Act or under supplementary legislation, and without such registration no one, even a physician lawfully engaged in the practice of medi-

cine, could administer, dispense, or prescribe any drug covered by the federal licensing system.

"To any claim that the Federal Government has no right thus to trespass on the prerogatives of the States with respect to the regulation of the practice of medicine, it must be pointed out that the Federal Government, in the control of interstate and foreign commerce, in taxing power, and in treaty-making, is supreme. Its authority over interstate and foreign commerce under time-honored procedents could hardly be construed to authorize it to regulate the drugs and other agencies that physicians can use in their practice of medicine within any State, but under recent federal claims of authority, anything and everything affecting the course of interstate and foreign commerce lies within federal jurisdiction; and if that claim is established there appears to be no limit of federal authority over the professional use of narcotic drugs. The Federal Government is already using its taxing power as a cloak for clearly regulatory police purposes, under the Harrison Narcotic Act. Under its treaty-making power, the Federal Government, with the approval of the United States Supreme Court, has gone a long way toward limiting the rights of the States with respect of the control of migratory game birds.

"If an attempt should be made to set up a federal licensing system to control the use of narcotic drugs by physicians, it would probably be under a federal claim of authority to make regulations to carry into effect some of the various international conventions to which the United States is a part under the provisions of Article VI, Clause 2, of the Constitution, which provides:

" 'This Constitution, and the laws of the United States which shall be made in pursuance thereof; *and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every State shall be bound thereby, any thing in the Constitution or laws of any State to the contrary notwithstanding.*' Whether a federal licensing system to regulate the practice of medicine to the extent of controlling the use of narcotic drugs could be lawfully established under these provisions of the Constitution, in view of other provisions contained in it, it would be useless here to dscuss.

"*The present recrudescence of the idea of a federal licensing system for the control of narcotic drugs is the result—in part at least—of inaction by some state medical examining and licensing boards.* Even when evidence has been submitted to them showing that physicians practicing under authority of licenses that they have issued are narcotics addicts, or have been convicted of violating the Harrison Narcotic Act, or both, some such boards have neither suspended nor revoked the licenses of the offending physicians. In some cases, failure to act has been due to the absence of any lawful authority for action, but that has not always been the case. In States in which there is no lawful authority for the suspension or revocation of licenses under the conditions stated, the medical examining and licensing boards have too often apparently made no effort to procure legislation to permit such action. Such conditions as these tend to promote the establishment of a federal licensing system.

"It will certainly not be to the best interest of either the medical profession or the public to have the Federal Government, by withholding or cancelling registration under the Harrison Narcotic Act or under any similar statute, create a class of physicians who are actively and lawfully engaged in the practice of medicine under state authority, but who are forbidden by the Federal Government to use in connection with their practice such essential narcotic drugs as opium and coca leaves and compounds and derivatives of them. I am therefore submitting this matter to you for such action as you deem proper.

"It might be well for you to learn from the medical examining and licensing board of your State what the situation is there, and particularly what action, if any, it has taken with respect to evidence that has been submitted to it, if any, by the Bureau of Narcotics, Treasury Department, to prove cases of addiction or to prove convictions under the Harrison Narcotic Law among licentiates of the board. With such knowledge you will then be in a position to take such action as may be necessary to forstall demands for the establishment of a federal licensing system.

"I shall appreciate it very much if you will let me know what action you take.

"Yours truly

"(Signed) Wm. C. Woodward,
"Director."

THE ANTI-VIVISECTION CAMPAIGN*

The Anti-vivisectionists, with ample funds at their disposal and with the support of powerful newspapers, are conducting an energetic campaign in 32 states, and are organized, as they publicly announce, to carry their fight to the finish. Model bills against vivisection will be introduced in 32 state legslatures at the coming sessions.

The enactment of these laws would be highly inimical to medical research. It would impede medical progress and hamper medical education. To prohibit animal experimentation would destroy the processes that have yielded many discoveries that have contributed to the prolonging and saving of the lives of many millions of our fellow-beings, particularly of our children.

Animal experimentation is conducted humanely. Operations are invariably performed under an anesthetic. Medical progress cannot continue

without the use of animals for diagnostic, drug standardization, as well as for research and teaching purposes. Hospitals and the scientists attached to hospital staffs are vitally interested in the continued use of animals in the work of our laboratories.

The Board of Trustees of the American Hospital Association, in session December 8, adopted the following resolution:

WHEREAS, anti-vivisection societies, who are well organized and with ample funds at their disposal, have publicly announced that they are in a campaign to fight to the finish for passage of anti-vivisection legislation in 32 states and are having introduced in the various state legislatures laws prohibiting vivi-section and in this manner destroying all opportunities for research through animal experimentation;

BE IT THERFORE RESOLVED, That the Board of Trustees of the American Hospital Association join with other organized medical bodies in memorializing each hospital to have its medical staff oppose the passage of anti-vivisection bills as a serious threat to medical progress.

Our hospitals should enlist the interest of each member of their staffs and secure the active cooperation of the members of their Boards of Trustees in combating the proposed anti-vivisection legislation.

*From THE BULLETIN OF THE AMERICAN HOSPITAL ASSOCIATION, Vol. 9, No. 1, Jan., 1935.

MISSISSIPPI STATE BOARD OF HEALTH

During 1934 the State Hygienic Laboratory manufactured and distributed to physicians of Mississippi 893,600 cc. of typhoid vaccine; also 46,558 ampoules of silver nitrate solution.

The laboratory examined 437 heads of animals suspected of having rabies. Of these 230 were positive. During last year 1,982 rabies treatments were manufactured and sent out. Since the first of January, 1935, there has been an unusual demand for rabies treatments, 127 having been sent out in the first thirteen days of January.

The following physicians were granted license to practice medicine in Mississippi on the basis of reciprocity, by the State Board of Health on December 21, 1934.

Dr. Everett Edwin Robinson, Jr., Meridian.
Dr. James Edward Tate, McComb.
Dr. Virginia Borum Hickerson, Sanatorium.
Dr. Albert Grady LeRoy, Booneville.
Dr. Lolita Goodhue, Gulfport.
Dr. Oscar Alcander Kennedy, Tremont.
Dr. Everett Lovorn, Louisville.
Dr. J. T. Davis, Corinth.
Dr. Virgil Shipp, Itta Bena

Felix J. Underwood,
Executive Officer.

CENTRAL MEDICAL SOCIETY

The Central Medical Society held its first meeting of the year at the Robert E. Lee Hotel, Jackson, January 8, at 6:30 p. m.

A short talk, discussion, committee report and dinner on the roof of the hotel was the program. The general spirit of the meeting was get-together of the members.

Before the general session a call meeting of the executive committee, composed of Drs. W. D. Dobson, E. L. Green, D. W. Jones, G. A. Adkins, J. P. Wall, and W. E. Noblin was held at the hotel beginning at 6 o'clock.

The program consisted of a talk on "Allergy in Children," by Dr. N. C. Womack, followed by a discussion of the talk by Drs. J. K. Bullock and G. W. Owens

The president, W. B. Dobson, discussed policies of the society for the coming year, and, a general discussion of activities, suggestions and criticisms followed a report of the committee on "Suppression of Unfair Damage Suit Practice," by chairman George E. Adkins.

The Central Medical Society is composed of doctors of the counties of Hinds, Madison, Rankin, Scott, Simpson, and Yazoo.

The amendment changing the constitution says: Every physician residing and practicing in the above counties in Mississippi and legallly registered as such, and who is in good professional standing, shall be eligible for membership, upon approval of two-thirds of the membership present and voting.

L. W. Long.

CENTRAL MEDICAL SOCIETY
OFFICERS AND COMMITTEES FOR 1935

President—W. B. Dobson, Lamar Bldg., Jackson.

Vice-presidents: Hinds—J. K. Bullock, Lamar Bldg., Jackson; Madison—J. P. Burnham, Canton; Rankin—J. B. Ainsworth, Florence; Scott—O. O. Austin, Harpersville; Simpson—E. L. Walker, Magee; Yazoo—Gilruth Darrington, Yazoo City.

Secretary—L. W. Long—Standard Life Bldg., Jackson.

Treasurer—N. F. Kendall—Standard Life Bldg., Jackson.

Delegates—Hinds—G. E. Adkins; Alternate F. E. Van Alstine.

Hinds—T. E. Wilson; Alternate C. C. Verher.

Madison—J. B. Howell; Alternate J. P Burnham.

Rankin—H. N. Holyfield; Alternate J. B. Ainsworth

Scott—R. B. Austin; Alternate J. M. Townsend.

Simpson—A. E. Kennedy; Alternate L. P. Burdine

Yazoo—O. H. Swayze; Alternate J. T. Rainer.

Board of Censors: D. W. Jones, Chairman, W. H. Watson, L. W. Long.

Committee on Program and Scientific Work: G.

E. Adkins, Chairman, T. E. Ainsworth, J. F. Armstrong, H. F. Garrison, Jr., L. B.McCarty.

Committee on Memoirs, Personal History and Publicity: J. P. Wall, chairman, R. W. Hall, J. W. Barksdale. W. E. Noblin, Chairman, W. D. Mc Committee on Public Health and Legislation: Publicity: W. E. Noblin, Chairman, W. D. McCalip, R. N. Holyfield, E. L. Walker, W. E. Anderson, J. B. Howell.

Executive Committee: W. B. Dobson, E. L. Green, D. W. Jones, G. E. Adkins, J. P. Wall, W. E. Noblin.

COAHOMA COUNTY MEDICAL SOCIETY

The Coahoma County Medical Society and the Clarksdale Hospital staff met at the Clarksdale Hospital at 1:30 p. m., Wednesday, January 9, President W. S. Slaughter presiding.

The secretary then read the minutes of the previous meeting and called the roll, as ordered by the president. A motion was made and seconded that the minutes be adopted as read. The motion carried.

A report on the previous business with the ERA relative to resolutions passed at the November meeting was given by Dr. T. M. Dye, and discussed fully by the members present.

Dr. T. M. Dye then reported that the matter of arranging a postgraduate course in this vicinity, under the supervision of Dr. Lapham and the State Board of Health, had been taken up with the secretary of the Delta Medical Society but no definite arrangements had yet been made. Dr. Dye then motioned that the secretary take this matter up with the chairman of the post-graduate course committee for further arrangements. The motion was seconded and carried.

The secretary then reported on the hospital insurance plan of the Baptist Memorial Hospital of Memphis, Tenn., and it was discussed fully by the members present. Dr. T. M. Dye then made a motion that the secretary correspond with the state insurance commissioner and determine what conditions the Baptist Hospital of Memphis must meet in order to sell this insurance in Mississippi and also to determine whether or not the Baptist Hospital has met the necessary standards. The motion was seconded and carried. Dr. Brandon then suggested that the Coahoma County Medical Society go on record at this meeting as to their attitude in the matter. Dr. Wilkins then made a motion that the relations committee meet with the Board of Directors of the Clarksdale Hospital and investigate the plan of hospital insurance being sold in this vicinity by the Baptist Hospital of Memphis, and if the investigation proves favorable that the Clarksdale Hospital institute a similar plan. The motion was seconded and carried.

The report of the relations committee was then given by the chairman, Dr. T. G. Hughes, who reported that everything was running smoothly.

The president then appointed the same members to serve on the relations commitee for another term. They are Dr. T. G. Hughes (chairman), Dr. I. P. Carr, and Dr. D. H. Griffin.

The matter of a Tuberculosis Diagnostic Clinic being held in Coahoma County by Dr. W. D. Hickerson, under the auspices of the County Health Department, during the week beginning Feb. 18, was then presented by the Coahoma County health officer. This was discussed fully by members present and a motion was made that the Society go on record as heartily endorsing same. The motion was seconded and carried unanimously.

Dr. D. O. Pierce then made a talk on "Early Syphilitic Infections," stressing the value of early treatment. Discussions were offered by Drs. Brown, Slaughter, Barrett, Hughes and Levy.

Dr. S. D. Robinson was unavoidably detained and thus could not appear on the program. He was carried over until the February meeting.

Dr. Wilkins then suggested that an effort be made to increase the attendance of our County Medical Society, notifying doctors in the county that attendance at Medical Society meetings is a qualification that they must meet in order to remain on the staff of the Clarksdale Hospital.

Drs. S. D. Robinson and J. A. Slack were noted as speakers on the program for the February meeting. There being no other business, the Society adjourned.

Norris C. Knight.

EAST MISSISSIPPI MEDICAL SOCIETY

The annual meeting of the East Mississippi Medical Society was held at the Lamar Hotel, Meridian, on the afternoon of December 20, 1934. The following officers were elected:

President—H. L. Arnold, Meridian.

Secretary—T. L. Bennett, Meridian.

Treasurer—A. C. Bryan, Meridian.

The program included the following:

Injection Treatment of Hemorrhoids.—Dr. R. L. Donald, Meridian.

Endocrine Therapy.—Dr. R. G. Hand, Philadelphia.

Dr. R. R. Welch of the East Mississippi State Hospital, Meridian, was elected to membership.

The following changes in constitution and by-laws were proposed in writing, read by sections and approved almost unanimously by the Society:

CONSTITUTION:

ARTICLE III.—Component Counties.—

Component counties shall consist of Newton, Neshoba, Winston, Lauderdale, Leake, Clark and Kemper.

ARTICLE V,—Section I.—

Meetings are to be held the first Thursday after

the first Sunday in June and December. (Two meetings each year).

ARTICLE V.—Sction II.—

All meetings shall be held in Meridian.

ARTICLE VI.—Officers.—

The officers of this society shall be a President, seven Vice-Presidents, a Secretary, a Treasurer, seven Delegates and seven Censors.

ARTICLE VI.—Section 2—

The President shall be elected for a term of one year and is to come from the society at large. The President of each component county medical society is to automatically become Vice-President of this Society. The Secretary and the Treasurer shall be elected for a term of two years from the society at large. One Censor and one Delegate is to be elected by each County Medical Society and these Censors and Delegates respectively are to become those of this society. **The Secretary of each County Medical Society shall become Editor to the New Orleans Medical and Surgical Journal for that county.** All of these officers shall serve until the adjournment of that session at which their successors are elected.

BY-LAWS:

CHAPTER II. Section 2.—Election of Officers.—

Nominations shall be made by a nominating committee consisting of three men appointed by the President at the December meeting. The nominating committee shall nominate two candidates for each office. Nominations may also be made openly from the floor. The election shall be by secret ballot, the majority of the votes cast being necessary for election.

CHAPTER III.—Duties of officers.—Treasurer shall collect all dues and assessments and keep account of all funds of the society.

CHAPTER IV.—Section 1.—

The standing committees shall be as follows.—(1) A committee on programs and scientific work. (2) An executive committee.

CHAPTER IV.—Section 2.—

The program committee shall consist of three members including the Secretary who shall be ex-officio chairman, the other members to be appointed by the President. This committee is to be appointed at the December meeting and function immediately thereafter to arrange the program for the entire year.

The executive committee, of which the President is to be ex-officio chairman, to consist of three other members to be appointed by the President. It is the duty of this committee, and it shall be imbued with proper power to direct all policies of the society.

T. L. Bennett,
Secretary.

HOMOCHITTO VALLEY MEDICAL SOCIETY

The regular quarterly meeting of the Homochitto Valley Medical Society was held at Natchez, January 10, at 2 P. M., with an excellent attendance. Following a very enjoyable luncheon the secretary, Dr. S. E. Field, announced the program which follows:

1. A Report of Two Cases of Thyroid Disease, with the Review of the Recent Literature on the Same.—Dr. Edwin E. Benoist.
2. An Unusual Case of Cirrhosis of the Liver.—Dr. W. K. Stowers.
3. The Conservative Treatment of Tubal Disease.—Dr. F. S. Dixon.
4. Report of Further Personal Observations of Spinal Anesthesia.—Dr. H. A. Whittington.

Following these excellent papers there was a general discussion of each.

Lucien S. Gaudet.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

A regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Elks Club, Vicksburg, January 8 with eighteen members and four guests present. Dr. F. M. Smith, President, presided.

After a supper, served at 7 P. M., the program was presented as follows:

SUBJECT: The Relation of the Medical Profession to the Emergency Relief Administration So Far As It Concerns the Medical Care of Indigent Persons.—Dr. S. W. Johnston, Vicksburg, Chairman.

Discussion opened by Drs. S. W. Johnston, W. H. Scudder, Mayersville, and H. S. Goodman, Cary.

General discussion by Drs. S. W. Johnston, N. B. Lewis, Vicksburg, W. H. Scudder, Mayersville, Hon. C. B. Braun, Jackson, and Dr. F. J. Underwood, Jackson.

Hon. C. B. Braun, Administrator, Emergency Relief Administration for Mississippi, and Dr. Felix J. Underwood, Executive Officer, Mississippi State Board of Health, were special guests of the Society.

The President appointed a committee on public Health and Legislation as follows: Drs. E. H. Jones, Vicksburg, W. C. Pool, Cary, W. H. Scudder, Mayersville.

The next meeting of the Society will be held on Tuesday, February 12, at 7 P. M. The subject will be "The Periodic Health Examination."

JACKSON COUNTY MEDICAL SOCIETY

Jackson County Medical Society met December 20. The following officers were elected. Dr. J. N. Lockard, Pascagoula, president; Dr. A. P. McArthur, Moss Point, vice-president; Dr. J. N. Rape, Moss Point, Secretary. Frank O. Schmidt.

LAUDERDALE COUNTY MEDICAL SOCIETY

The Lauderdale County Medical Society held its meeting at the City Hall at 7:30 P. M., December 3, 1934. The following officers were elected.

President—Dr. H. S. Gully
Vice-President—Dr. E. B. Key
Secretary—Dr. R. L. Donald
Delegate—Dr. E. B. Key
Alternate Delegate—Dr. R. L. Fowler, Marion
Censor—Dr. W. Jeff Anderson

Mr. Fleming, manager of the local relief office, made a short talk on medical relief, and relief in general.

R. L. Donald.

NEWTON COUNTY MEDICAL SOCIETY

Newton County Medical Society met pursuant to call of President, W. E. Box at 2 p. m. in Decatur. The following officers were elected: Drs. W. E. Box, president; H. B. Gilmer, vice-president; W. A. McMahen, delegate to State Medical Association; Z. C. Hagan, alternate; Dudley Stennis, secretary and censor. Motion made and carried to adopt constitution and by-laws as submitted. Decatur selected as meeting place of Society. Society shall meet first Thursday in each month at 2 P. M. Motion made and carried that the members of the Newton County Medical Society refuse to accept any other orders from the F.E.R.A. or render any further services on relief orders until present rules and regulations are modified. President appointed Drs. Pennington and Jarvis members of the executive committee.

Dr. A. M. McCune of Decatur elected to membership.

Dudley Stennis.

WINONA DISTRICT MEDICAL SOCIETY

The next meeting of the Winona District Medical Society will be held in Durant, on March 19. Below are listed the officers elected at the Winona meeting December 18 for 1935. Since this meeting Dr. W. O. Mabry the president elected, has passed away.

President-Elect Dr. W. O. Mabry, Goodman.
Vice Presidents:
Dr. S. L. Bailey, Attala County.
Dr. W. H. Curry, Webster County.
Dr. D. H. Thomas, Choctaw County.
Dr. J. K. Avent, Grenada County.
Dr G. S. Redditt, Carroll County.
Dr. R. C. Elmore, Holmes County.
Dr. E W. Holmes, Montgomery County.
Secretary—Dr. P. B. Brumby, Lexington.
With best of luck for the New Year

P. B. Brumby.

ADAMS COUNTY

Dr. Lapham began his course of 10 lectures on obstetrics at Natchez Hospital, 1st Monday evening with many in attendance, and will continue every Monday evening until the course is completed.

Lucien S. Gaudet.

COPIAH COUNTY

Dr. J. P. Watson, of Hazelhurst, died December 28 and was buried the following Sunday at Hazelhurst with the Masonic ritual. Dr. Watson had been a resident of Hazelhurst for about 30 years and did an active practice up to about 10 years ago when his health began to fail.

Dr. J. T. Googe, county health officer for Copiah, resigned, effective January 1, to accept work with the Florida State Board of Health as assistant state director of county health work.

Dr. J. W. Duggar, of Jackson, will direct the health unit until a successor to Dr. Googe can be selected.

W. L. Little.

DESOTO COUNTY

At the January meeting of the DeSoto County Medical Society the following officers were elected to serve for the year 1935: Dr. A. J. Weissinger, president; Dr. J. M. Wright, vice-president; Dr. L. L. Minor, secretary-treasurer and editor; Drs. A. L. Emerson, D. C. Funderburke and A. V. Richmond, censors and medico-legal committee.

Dr. William A. Powell, of Nesbitt, 70 years old, a retired physician and a worthy gentleman was killed instantly when his automobile was struck by another car. This sad accident occurred Saturday, January 5, at 6 P. M. He was laid to rest the next day in beautiful Forrest Hill Cemetery.

L. L. Minor.

HINDS COUNTY

The New Year is here and we want to make it the best year ever. Everyone should feel it their duty and at the same time a privilege to attend the meetings of their medical societies and help make them a success again this year.

The staff of the Baptist Hospital held its regular meeting the third Tuesday in December. There was a good attendance to enjoy the program and the splendid meal.

We regret to report the death of Dr. J. M. Ware on December 10, 1934. Dr. Ware was the father of Dr. B. M. Ware, now practicing in Jackson. We extend our sincere sympathy to the loved ones left behind.

Dr. L. H. Hughes, who has been confined to his home recently, is now able to be out among his friends again but is not in active practice.

Dr. F. E. Rehfeldt has recently spent some time in Chicago doing post graduate work in the clinics and hospitals there.

Dr. G. W. F. Rembert is rapidly rgaining his strength following a recent operation. We are de-

lighted that Dr. Rembert is progressing so satisfactorily.

The Jackson Infirmary is making quite a change in the way of progress. The building next door is being completely remodeled and will house the laboratory, library, doctor's offices, and the nurses' home. This work will be completed by the first of February and thereby give more room in the main building for handling of patients.

Dr. N. C. Womack, state chairman of the American Academy of Pediatrics, has been called to Nashville, January 13, to attend the special meeting of the chairmen of the seventeen southern states.

Dr. Pierre Robert, of Vicksburg, was a recent visitor to the Capitol City.

Wm. F. Hand.

HOLMES COUNTY

Dr. P. B. Brumby, Lexington, is spending the month of January doing post graduate work in New York City.

Dr. C. J. Vaughn of the County Health Department is in a hospital in Memphis recovering from an orthopedic operation.

Dr. Vernon L. Richards, a prominent dentist of Lexington and Miss Sadie McRae of Lexington, were married in Durant, December 12, at the home of the bride's sister, Mrs. Francis J. Criss.

Dr. W. O. Babry, of Goodman, passed away at his home on December 27. Dr. Mabry was one of the oldest practitioners in point of service in Holmes county, having moved to Goodman from Sallis 35 years ago. He was 61 years of age and was a graduate of the Tennessee Medical College. He was a Spanish American War veteran, having served in the medical corps of the army in the yellow fever district; president of the Winona District Medical Society; a member of the Mississippi State and American Medical Associations; a Mason and a member of the Methodist church. He had served as physician to the Holmes County Agricultural High School at Goodman since its establishment in 1911.

Dr. and Mrs. C. J. Vaughn, of Lexington, were the recipients of "A bundle from heaven" December 8, 1934, an 8 pound boy.

R. C. Elmore.

LAFAYETTE COUNTY

It has been some months since you have heard from Lafayette county. I have no excuse to offer except that I have been busy and am not a very good man for this job anyway.

The next meeting of the North Mississippi Medical Society will meet in Water Valley, January 23.

I had the sad misfortune to lose my father, Dr. A. C. Bramlett, on December 7, at the age of 83. He has not been active for the past three years.

With best wishes for the New Year.

E. S. Bramlett.

LEFLORE COUNTY

Dr. and Mrs. C. D. Alexander, Vaiden, visited Greenwood, December 7 to welcome their grandson, James Armistead Townes, Jr., born to Mr. and Mrs. J. A. Townes of Minter City, at the Greenwood-Leflore Hospital, December 7. Mrs. Towne was formerly Miss Ruth Dent Alexander of the County Health Department.

Dr. G. Y. Gillespie, Sr., Duckhill, was a patient at the Greenwood-Leflore Hospital a few days in the early part of December.

Among the visiting doctors to Greenwood in December were: Drs. J. D. Biles, Sumner; J. A. Alexander, Indianola; S. D. Newell, Inverness; Lee Lipscomb, Como; J. K. Avent, Grenada; and Drs. Rayburn, Sr. and Jr., Pontotoc.

Dr. A. L. Gray of the Epidemiological Unit of the State Board of Health addressed the quarterly regional meeting of the health nurses at the rooms of the Greenwood Chamber of Commerce on December 20.

Dr. Chas. H. Otken, Falfurrias, Texas, visited in the home of his brother, Dr. L. B. Otken, Xmas.

Dr. Robert Dickins Monticello, Ark., spent Xmas day in the home of his parents, Dr. and Mrs. W. B. Dickins.

Dr. and Mrs. S. L. Brister, Jr., and daughter spent a few days Xmas in Tuscaloosa, Ala., with relatives.

Dr. Fred Sandifer, who is serving his internship at the Charity Hospital in New Orleans, spent a few days during the holidays at home here.

Dr. Jesse Hightower, student at Tulane, spent Xmas at Itta Bena, his home.

Dr. and Mrs. J. C. Adams and children spent Xmas in New Orleans with relatives.

Dr. W. E. Denman spent Xmas day in Memphis with his sister. His son, W. E. Jr., has entered the University of Tennessee for the study of medicine.

Dr. and Mrs. J. P. Bates are happy to have home their daughter, Mrs. H. G. Cunningham, very much improved in health after a major operation at the Mayo Clinic.

Dr. and Mrs. C. H. Holman and children of Carrollton attended a family reunion of the Holman family in the home of Mrs. A. A. Tate, this city, Xmas day.

A thief entered the office of Dr. I. P. Bright a few days before Xmas and stole his microscope

W. B. Dickins.

MONROE COUNTY

"Howdy Everybody!" With these words I greet *all* my friends and readers, and wish for each and all of you a happy and prosperous year. I hope

that you all had a joyous Christmas and that we, all of us, may forget the unpleasant things that may have come our way during the year(s) just past. With the holiday pleasures that came this way let me mention the home-coming of two of our own boys who have gone into medicine in recent years. I refer to Dr. Ciel Holland who now lives and works in Houston, Texas, and Dr. I. P. Burdine, Jr., who is on the staff at the Sanatoruim with Dr. Boswell. Both these young men are splendidly equipped for the work they have chosen. Dr. Holland seems to be devoting his time and thought to G. U. work and Dr. Burdine to general surgery. Both of these young men are highly educated and have had unusual training in preparation for their life work. We are proud of them.

Dr. M. Q. Ewing, who is medical supervisor of our local hospital, and his wife have just returned from a two-weeks' visit to Florida points. Dr. A. I. Boozer and his wife are recuperating from a rather hard tussle with influenza. Dr. C. E. Boyd of Hatley has been in personal contact with this same villanous complaint. But I think he has been trying to keep going. In fact, he tells me that he has had more work than he could do even had his own health been perfect. It seems that the community served by him had had an epidemic of flu with a few cases of pneumonia added. So far as I know all the other Monroe County doctors and their families are well.

The Monroe County Medical Society will hold its January meeting in Aberdeen tonight. We are expecting a full and interesting meeting—wish that I might wait and write after the meeting, but I have engagements ahead that will engage my time intervening between now and the 10th, on which date Dr. "Lip" Lippincott insists all correspondence shall be in his hands. What a great editor we have! I hope all of you appreciate him and his splendid work as I do. Let us give him a hand to cheer him on for the arduous work before him during 1935.

Now I come to a subject that is dear to my heart and one that I am entirely inadequate to cover as it should be covered. I refer to the December meeting of the Thirteen-Counties Society. What a meeting that was. Although the weather was inclement, they were there from all points of the compass. The meeting (as usual) was held at Tupelo. Tupelo is a wonderful town. It seems to be equal to anything. Seventy thousand people were there to see the President and they handled the situation. I really think, if the twenty thousand who lingered at Amory to see him and hear him for the short time to spare from his schedule, had gone to Tupelo, they, too, could have been handled there. But back to OUR meeting—Dr. George Hendon was our guest essayist. He was great—he told just how to care for peptic ulcer cases. We wish he might have had time to teach us the use and possibilities of "bone pegs" in hip joint fractures. But he promises to come again. Dr. Hugh Gamble, Dr. John Culley and Dr. Tom Dye—some of our own great (and near great) ones were with us. Dr. Holder and Dr. Jacobs answered "present" for all our Memphis friends. How glad we are to welcome our friends from beyond our borders. We hated, unspeakably, to give up the services of Jamie Acker, who has been our most efficient secretary for many years. Underwood and Acker, each of them, served us long and well as secretary. And the enviable success of the society is due to their efficiency and faithfulness. We selected Dr. A. J. Stacey of Tupelo to catch the torch so long held aloft by the aforementioned men. We are quite sure he will measure up to them in all respects. Forward—march, are the orders that he has issued. We immediately fell in line and caught step. If there should be any lagging by any district society, I trust that it may salute us as we pass by. If we can help in any way we shall be only too glad to do so. Our new president is dean of the profession in Northeast Mississippi. He is none other than Dr. S. R. Deans of West Point. Give us a handclasp and visit with us.

G. S. Bryan.

NEWTON COUNTY

Dr. McCune, Estes, has located in Decatur, in the practice of his profession.

Dr. Jobe is located at Roberts, and has charge of C. C. C. camp there. He accompanied Mr. Chas. Rancier of Citronelle, Ala., injured in gravel cave-in to Newton Infirmary where he died, this being the first fatality in the camp since its location.

Dr. S. P. Vandivere has charge of camps at Burns and Morton. He also was a recent visitor to Newton Infirmary, bringing a patient for minor injury.

Miss Elizabeth Stennis, daughter of the correspondent, underwent an operation for acute appendicitis in Newton Infirmary and is now making an uneventful convalescence.

Dr. and Mrs. G. W. Bounds, Meridian, were guests of Miss Stennis.

Mrs. T. W. Jarvis was confined to hospital for two days during the past week.

Dr. and Mrs. O. Simmons made a trip to Enid, Sunday.

Mrs. H. McMullan, dietitian for Newton Infirmary, accompanied Mrs. M. L. Flynt went to McComb and Summit over the week end.

Trusting the coming year may be a more prosperous one for all of us.

Dudley Stennis.

PONTOTOC COUNTY

The Pontotoc County Medical Society held the first meeting of the year, Tuesday, January 1, in

the office of Dr. R. P. Donaldson, county health officer.

The new officers for the year are as follows: Dr. E. B. Burns, Ecru, president; Dr. O. F. Carr, Pontotoc, vice-president; Dr. R. W. Carruth, Chesterville, secretary and chairman of program committee.

Due to the illness of Dr. Burns' father, the president was unable to be here. The meeting was called by Dr. Carr, acting chairman. A very interesting program followed.

A demonstration of applying an ambulant brace to a case of infantile paralysis was conducted by Dr. Donaldson. The subject, James Raines, ten years old, of Springville, has had this condition since five years of age. The boy is to be presented at the next meeting of the society to determine the progress of the correction.

A demonstration of roentgenograms of general types of cases was offered by Dr. A. J. Stacy of Tupelo Hospital and general discussion followed.

Dr. W. H. Eason of Tupelo reported a case of hemophilia or hemorrhage in the new born. This was also followed by general discussion.

The doctors present were J. Rice Williams, V. B. Philpot and Douglass D. Baugh of Houston; A. J. Stacy and W. H. Eason of Tupelo; J. W. Gillispie of Sherman; A. H. McGregor of Randolph; W. P. Webster of Robbs; W. H. Reid of Toccopola; and O. F. Carr, J. A. Rayburn, T. H. Rayburn, A. P. Dunavent, J. W. Turner and R. P. Donaldson of Pontotoc.

Miss Jerome Sage, the county administrator, was a guest and expressed her interest and appreciation for the cooperation of the Society with the Welfare Department.

Refreshments of coffee, hot chocolate and cakes were served complimentary by the Anderson Drug Company.

We are sorry to hear of the illness of Dr. E. B. Burns' father of Ecru and hope he will soon be on the road to recovery.

R .P. Donaldson.

WARREN COUNTY

Dr. Galloway, Director of Bureau of County Health Work, for the State Board of Health of Kentucky, Louisville, Kentucky, recently spent a day in the Warren County Health Department, Vicksburg, observing and studying the methods of record keeping, etc.

The Vicksburg Infirmary held its monthly staff meeting Wednesday, January 1, with an attendance of thirteen. Two visitors were in attendance, Dr. Gaines of Tallulah, Louisiana, and Dr. Pool, of Cary.

The many professional Vicksburg friends of Dr. Goodman, of Cary, are pleased to learn that Mrs. Goodman has recovered sufficiently from her recent illness to return to her home after having been hospitalized in this city for several weeks.

Dr. Benson Martin, Jr., and wife of New Orleans, Louisiana, visited his father and mother, Dr. and Mrs. B. B. Martin, during the Christmas holidays.

The many professional friends in Vicksburg of Dr. W. C. Pool of Cary, regret to learn that during the Christmas holidays he spent the most of his time at the bedside of a sick father and mother, who reside in South Mississippi.

The friends of Dr. L. J. Clark appreciate most sincerely the good news that brings us assurance that his good wife, after a rather long and severe illness, is well on the way to recovery.

Dr. B. B. Martin and wife have been on a two weeks' New Year visit in New Orleans, Louisiana, and surrounding parts, spending most of the time with their son, Dr. Benson Martin, Jr., and his wife. Dr. Benson Martin, Jr. is and has been serving for some while as house physician at the Baptist Hospital, New Orleans.

Dr. George Street and Dr. Laurence J. Clark, the "Carbohydrate Twins," on the first of January, 1935, travelled all the way to New Orleans just to pull "lolly-pops" from the "Sugar Bowl," and Oh! what morsels they found when Tulane roped that "Louisiana Syrup" around the Temple boys from Philadelphia, Pennsylvania.

Dr. W. H. Parsons attended, last month, the meeting of the Southern Surgical Society, which held its annual meeting at Sea Island, Georgia. At this convocation Dr. Parsons received the distinguished recognition of membership in this body.

The Vicksburg Sanitarium, at its January staff meeting, announced that at the February staff meeting, the refreshments would consist of a quail supper. We are assuming that Dr. Jack Birchett will provide the quail, and we surmise there will be an early migration of "Bob White" and all his bevy.

Dr. Provine of Tallulah, Louisiana, and Dr. Williams of Lake Providence, Louisiana, were recent visitors in our city and while here attended the staff meeting of the Vicksburg Hospital.

Well, it seems our boyhood friend, and our life long friend, Dr. Will H. Frizell of Brookhaven, Lincoln County, believes in the "psychological moment" and waits for that moment to play his "trumps" especially when he feels certain he has his game "in the bag." It really looks like he has in the person of Dr. John T. Butler, the record in longevity of service in the practice of medicine in Mississippi. May Dr. Butler's days be many yet in the "Homeseekers' Paradise." But to Dr. Will Frizell, the Don Quixote for "Record Breaking," we wish to throw down another challenge, viz:

During the Christmas holidays, the inimitable Dr. Sidney W. Johnston, Vicksburg, Warren County, "The Paradise you don't have to seek," gave

his annual Christmas dinner to which he invited only his blood relatives. We are reliably informed that on this happy yuletide occasion, he sent out sixty-nine (69) invitations; that sixty (60) were accepted and sixty (60) came and partook of this royal hospitality. Now if Dr. Frizell, or any other Mississippi doctor has a record that will beat this one, don't hold out, shake the trump out of your sleeve, and put it on the table.

H. T. Ims.

WASHINGTON COUNTY

The many friends of Dr. and Mrs. D. C. Montgomery, Montbury, Greenville, are delighted to know that they and their three sons, Cameron, Jr., John Atterbury, and William Devere have fully recovered from a recent attack of influenza.

Dr. and Mrs. D. C. Montgomery, had as their house guests during the Christmas holidays Mr. and Mrs. Devere Dierkes of Hot Sprinks, Ark. and Kansas City, Mo.

The many friends of Mrs. D. C. Montgomery were shocked to learn of the recent death of her aunt and wish to extend their deepest sympathy.

Miss Dorothy Thompson, a senior student at Ole Miss, spent the Christmas holidays with her parents Dr. and Mrs. C. P. Thompson, Greenville.

Dr. and Mrs. C. P. Thompson and Miss Dorothy of Greenville were gracious hosts at a shower they gave Miss Kathleen Keady whose wedding to Mr. Joe McCormick of Helena, Ark. was solemnized on Christmas day.

Mr. Lyne Gamble, son of Dr. and Mrs. H. A. Gamble, Greenville, has returned to Vanderbilt where he is a student of Medicine, following the Christmas holidays spent with his parents.

Dr. and Mrs. J. F. Lucas, Mr. and Mrs. R. H. Lake, and Mr. and Mrs. I. B. Isenberg of Greenville, gave one of their outstanding Christmas parties at the Country Club during the holidays.

Dr. and Mrs. J. F. Lucas, Greenville, spent Christmas day with relatives in Carrollton. Mrs. Lucas and the children remained for a short visit with her mother.

Lieutenant Davis Lucas of New York, who has been visiting his brother Dr. John Lucas, Greenville, has returned home.

Dr. John Shackleford, and Dr. John Archer, Greenville, were among those attending the annual Cotillon Club dance given at the Legion Home, December 26.

The many friends of Dr. Paul Gamble, Greenville are delighted that he has completely recovered from the "flu."

Dr. J. A. Beals, Greenville, attended the meeting of the Radiological Society of North America held in Memphis the first week in December.

Dr. H. A. Gamble, Greenville, attended the meeting of the Southern Surgical Association held at Sea Island, Ga., December 11-13, where he read a paper entitled "Emphysematous Gangrene of the Abdominal Wall Following Acute Intra-Abdominal Infections; Report of 12 cases."

Dr. S. M. Shankle, Hollandale, was re-elected mayor of Hollandale recently.

Dr. and Mrs. S. L. Lane, Hollandale, made a short visit to Yazoo City during the past month.

Dr. Benjamin Luck and Mrs. Josephine White, Pine Bluff, Ark., spent the Christmas Holidays with Mr. and Mrs. R. A. Blackman, Greenville.

Mrs. Paul Gamble has recently returned from a short business trip to Louisville, Ky.

Dr. and Mrs. F. M. Acree spent the Christmas holidays with Dr. Acree's parents, Dr. and Mrs. F. M. Acree, Sr., at Dover, Tenn.

J. G. Archer.

WILKINSON COUNTY

Dr. Chas. E. Catchings and family of Woodville left for New Orleans this month. Dr. Catchings received an appointment for four months of post-graduate work at Tulane.

The first meeting of our post-graduate course with Dr. Lapham was held January 8 at Field Memorial Hospital. The meeting was most successful, instructive and well attended. We are looking forward to the next meeting.

Our next regular meeting of the Homichitto Valley Medical Society will be held in Natchez on January 10. This society will be continued as a social and scientific society after the organization of individual societies by the counties involved.

Best wishes for a prosperous and happy New Year to all.

S. E. Field.

WINSTON COUNTY

Under the new set up of the East Mississippi Medical Society the doctors of Winston County hope to re-organize a county unit, having allowed the organization to go down.

Dr. E. L. Richardson visited his mother at Winona some days ago. The doctor's mother and her twin sister, Mrs. Dukin, celebrated their 90th birthdays some time last summer.

Dr. Everett Lovorn of Louisville, R. F. D., got reciprocity with the Tennessee Board and now has license to practice in Mississippi.

Dr. T. C. Suttle was in the city one day this week.

Dr. W. B. Hickman made a visit to New Orleans, La. last week.

M. L. Montgomery.

MEDICAL ALUMNI OF "OLE MISS."

The enclosed letter is self-explanatory. We are trying to make this the greatest meeting in the history of the Assembly. This letter has been

mailed to more than four hundred of the medical alumni of "Ole Miss," and I am expecting a large response. "Ole Miss" will be featured this year.

P. W. ROWLAND,
University, Mississippi,
January 12, 1935.

Dear Doctor:

At the coming meeting of the Mid-South Post Graduate Medical Assembly, February 12, 13, 14 and 15, to be held in the city of Memphis, there will be a big Reunion of the Medical Alumni of the Universities of Tulane, Tennessee, Vanderbilt, Arkansas and "Ole Miss." "Ole Miss" will be featured.

Every medical alumnus of "Ole Miss" will receive this letter with the urgent request that you make every effort to be present. This is the first time such a movement has been attempted and I wish to make it a great success. It will probably be continued from year to year in the future.

You will receive an invitation from the chairman of the proper committee to be present. You will please note on the enclosed card the character of men who will appear on the program; every one a master. You cannot afford to miss this meeting.

This card is just a list of names, and in no sense a program, which will be sent you a little later.

With best wishes and the ardent hope that I will have the happy privilege of seeing you again, I am

Sincerely your friend,
P. W. Rowland,
President
Mid-South Post Graduate Medical Assembly.

COMMUNICATIONS

DR. LEON STANLEY LIPPINCOTT

Vicksburg, Mississippi
January 18, 1935.

Dr. J. H. Musser,
Editor-in-Chief,
New Orleans Medical and Surgical Journal,
New Orleans, Louisiana.
Dear Doctor Musser:

Thanks for your advice in regard to publishing letter of Dr. Darrington and copy of his letter to Dr. Martin.

Please leave out the note about responsibility of editor, and insert the two communications just before the notes from the State Board of Health.

With kindest regards,

Sincerely,
Leon S. Lippincott.

Yazoo City, Mississippi,
December 10, 1934.

Dr. Leon S. Lippincott,
N. O. Medical and Surgical Journal,
Vicksburg, Miss.
Dear Dr. Lippincott:

I am enclosing you a clipping from "Time" (Oct. 29, 1934) regarding the admission of a negro into the American College of Surgeons.

I am also sending you a copy of a letter that I wrote to Dr. Franklin H. Martin, Director-General of the College.

This radical departure from the high standard they had set is a serious mistake and I am sure that every reader of The New Orleans Medical and Surgical Journal will be interested in learning that a negro has been elected a member of the highest grade and most exclusive Surgical Association in America.

Yours very truly,
John Darrington.

COPY

December 1, 1934.

Dr. Franklin H. Martin,
Director-General,
American College of Surgeons,
54 East Erie Street,
Chicago, Illinois.
Dear Dr. Martin:

I have just heard that at your October meeting, the great and exclusive American College of Surgeons, admitted to full fellowship a negro surgeon.

I have before me a copy of "Time" containing an article on the subject and a picture of the negro. I do not understand it. I did not think that under any conditions a negro application would even be considered.

Medical associations in the South do not have negro members.

You deserve credit for having conceived this great Surgical Association, and since its beginning in nineteen thirteen, you have given your time and talent to its growth and development. It has done a vast amount of good and has exerted a beneficial influence on the surgical service and hospital treatment of patients in every part of this country. You had set a high standard for admission; your qualification requirements were rigid, and now by one act you have tossed your ideals aside and lowered your standard to zero.

One would think that a man who had the ability to organize and develop the highest grade Surgical Association in America, would be too smart to allow his Committee on Credentials and the Board of Regents to admit a negro and thereby offend the Southern members of the College.

It shows that no matter how smart a man may be, give him time and he will do some unwise thing.

You know that when a negro is admitted to the College he is on an equal footing with every other member. He has the right to attend all meetings, serve on committees, take part in all social functions, which includes dancing with the wives of other surgeons.

In the South one drop of negro blood converts a white man into a negro, and likewise, one negro member converts the American College of Surgeons into an undesirable association.

Many Southern members do not know of this action by the College and this letter will be given sufficient publicity to inform them.

I have been a member for twenty years. I regarded it a great honor to be a Fellow of the College. I was pleased to get in—now I am anxious to get out.

I respectfully tender you my resignation.

Very truly yours,
John Darrington.

THE WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION

President—Mrs. Henry Boswell, Sanatorium.

President-Elect—Mrs. Leon S. Lippincott, Vicksburg.

Secretary—Mrs. Adna G. Wilde, Jackson.

Treasurer—Mrs. C. C. Hightower, Hattiesburg.

Press and Publicity Chairman—Mrs. Hugh Johnston, Vicksburg.

THE WOMAN'S AUXILIARY TO THE SOUTH MISSISSIPPI MEDICAL SOCIETY

The Auxiliary to the South Mississippi Medical Society met in the Crystal Room of the Forest Hotel in Hattiesburg. There were 12 members present and Mrs. Mabel Mason presided at a short business session. Mrs. Mason had asked Dr. C. C. Buchannan to discuss eye clinics that had been held in several counties by the F. E. R. A. He was out of the city that day so Mrs. Mason told about the one held in Lamar county and also told about one for cripples held in Lamar county.

Mrs. T. E. Ross, Jr., and Mrs. Bethea had arranged a lovely tea table and were delightful hostesses during a social hour following the business session.

Mrs. W. W. Cranford and Mrs. J. P. Culpepper told about their trip to San Antonio and the Auxiliary to the Southern Medical Association.

Mrs. Mabel Mason.

VICKSBURG SOCIAL NOTES

Dr. and Mrs. Guy C. Jarratt entertained at a beautiful party at their home on Vickland street.

Dr. and Mrs. B. B. Martin spent a delightful visit in New Orleans with their son and daughter, Dr. and Mrs. Benson Martin, Jr. After a pleasant visit there, they extended their trip into Florida.

One of the most brilliant social events of the holiday season was a tea given by Mrs. John Birchett in honor of Mrs. Raymond Birchett, a lovely recent bride.

Mrs. Birchett's home on Clay street was beautiful with many artistic and brilliant arrangements of flowers. There were over one hundred guests to meet and welcome the charming bride. Mrs. John Birchett wore a rich gown of black velvet and the honoree was radiant in her wedding gown.

The hostess was assisted in receiving the guests by Mesdames Henry Minor Faser, of Jackson, mother of the bride, Julius Klein, Charles Schweizer, E. C. Hunt, Frank Andrews, George Birchett, Robert Paxton, Charles Wright, R. H. Hommell, A. Street, Marion Lassiter, and Harry Davis of Harriston. A charming group of young matrons assisted in receiving among whom were Mesdames Rudolph Robinson, R. L. Dent, Jr., Hugh McInnis, Preston Wailes, J. D. Thames, Jr., Theodore Birchett of Memphis, and Miss Lorraine Schweizer.

Mrs. Jiggitts of Canton spent the holidays with her daughter, Mrs. Edley Jones.

Mrs. Benson Martin, Jr. is visiting Dr. and Mrs. B. B. Martin.

Mrs. R. A. Street, Jr. spent the past week in Fayette visiting her mother and father, Mr. and Mrs. Noble.

Mrs. Embree, who has been the guest of her daughter, Mrs. George Street, has left for Rome, Georgia, to visit another daughter before returning to her home in Buena Vista, Virginia.

Miss Lois Haralson, daughter of Dr. H. H. Haralson, entertained his large and interesting family at a dinner party during the holidays. This was an occasion of great happiness to all.

Dr. and Mrs. C. J. Edwards had the pleasure of having their sons home for the Christmas holidays. Charles goes to "Ole Miss," and Franklin is in school at Mississippi State College.

Miss Polly Street, daughter of Dr. and Mrs. G. M. Street, was hostess to her many friends at a lovely party during the holidays.

Mrs. L. J. Clark.

THE WOMAN'S AUXILIARY TO THE ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY

The January meeting of the Auxiliary to the Issaquena-Sharkey-Warren Counties Medical Society will be held in the Monroe Room of the Hotel Vicksburg on Tuesday, January 16, at noon.

The business session will be preceded by luncheon with Mrs. C. J. Edwards as hostess.

A feature of the business meeting will be the installation of new officers for the coming year as follows:

President—Mrs. L. J. Clark.
President-Elect—Mrs. C. J. Edwards.
1st Vice-President—Mrs. D. A. Pettit.
2nd Vice-President—Mrs. Preston Herring.
3rd Vice-President—Mrs. L. E. Martin.
Secretary—Mrs. M. H. Bell.
Treasurer—Mrs. Pierre Robert.
Parliamentarian—Mrs. E. F. Howard.

The program subject will be "Madame Curie" with Mrs. S. W. Johnston as leader.

THE WOMAN'S AUXILIARY TO THE CENTRAL MEDICAL SOCIETY

Dr. and Mrs. F. E. Rehfeldt, on the morning of Saturday, December 29, honored their daughter, Henriette, and her friend, Miss Katherine Ellis, with an elegant old style southern breakfast. These young ladies with a number of their friends had just attended the Delta Beta Sigma Sorority dance.

Miss Lucy Rembert, the very attractive daughter of Dr. and Mrs. G. W. F. Rembert, complimented three 1934 debutantes, Miss Louise Green, Miss Charlotte Capers, and Miss Sallie Lee Hall, with an elegant one o'clock luncheon. Miss Rembert herself was honored with several debutantes while she was home during the holidays.

Miss Mary Lane Womack returned to Hollins College, Hollins, Virginia, following a wonderful Christmas and New Year season. While in Jackson, Miss Womack attended many beautiful social affairs in which the young people were complimented.

Dr. and Mrs. Lonnie B. Mosely spent several days with Mrs. Mosely's parents, Mr. and Mrs. Ransom in Aberdeen. They reported a very pleasant Christmas with their friends and relatives.

Dr. and Mrs. Long have been enjoying a pleasant visit from Dr. Long's mother, Mrs. L. C. Long.

The Woman's Auxiliary to the Central Medical Society did not meet in January due to crowded social activities.

Mrs. W. F. Hand,
Press and Publicity Chairman.

THE WOMAN'S AUXILIARY TO THE HOMOCHITTO VALLEY MEDICAL SOCIETY

The Eola Hotel was a bright center on Thursday for a social meeting of the members of the Auxiliary to the Homochitto Valley Medical Society, with guests from out-of-town joining the Natchez members for a lovely luncheon.

The spacious dining-room of the hotel was the attractive setting of the luncheon, with one long table seating the guests, with covers laid for thirteen.

The guests included Mrs. C. G. Mullins and Mrs. Massengale of Bude and Mrs. Phillip Beekman, Mrs. Edwin Benoist, Mrs. J. W. D. Dicks, Mrs. W. K. Stowers and her mother, Mrs. Bishop, Mrs. J. D. Shields, Mrs. McDonald Witkins, Mrs. J. W. Chisholm, Mrs. C. E. Everette, Mrs. B. T. Orendorf and Mrs. A. R. Perry.

A short business session followed the luncheon.

BOOK REVIEWS.

Annals of the Pickett-Thomson Research Laboratory. Monograph XVI, Part II. Influenza: By David Thomson and Robert Thomson. London, Bailliere, Tindall and Cox, 1934. pp. 1557. Price, $17.50.

This large and expensive volume which constitutes the second half of the author's work on influenza is of great interest as a book of reference and as such it is published. The volume is about 1000 pages in length, including a very detailed bibliography of 4,500 references cross indexed as to author and title. The authors have admittedly used all available articles for the sake of completeness rather than to try to segregate the more worthy from the less worthy publications. In other words, articles long since outdated and those founded on insufficient data have been denied their proper place in oblivion.

The book deals with extreme minuteness with the complications and sequelae, bacteriology of influenzal pneumonia, pathology, epidemiological data, as well as means of prevention and treatment of the disease and its complications.

Previous monographs by the authors have been primarily on the bacteriological aspects of various diseases. This fact and the intention of the authors that the book should be a work of reference accounts for the absence of any original work aside from a small section on the bacteriological aspect of influenza. Complications and sequelae, to the number of 138, which embrace practically the entire realm of medicine are discussed. Common conditions are taken up, which coexisting with influenza, make a serious disease more dangerous.

Under the head of bacteriology many data are presented, most of which, as is well known, are open to great question. The bacteriologic aspects of this disease have been at a relative standstill for a long time and no great progress in the study of the disease can be expected until more is known of bacterial life cycles and until better methods of isolating, culturing and identifying of microorganisms come into use. The section on pathology is quite complete and deals with complications individually both in regard to gross and cellular pathology.

The section on epidemiology is as interesting to the historian as to the epidemiologist and is no exception to the uniform completeness of the entire work. In the light of the information collected here the course of any future epidemic or pandemic could be prognosticated with a fair degree of certainty. The effectiveness of public health measures could be judged on any change in incidence, mortality and distribution as compared to figures of previous epidemics.

Many methods of prevention are discussed, including prevention of exposure, improvement in general health of individuals, isolation of the sick and attempted immunization by vaccines and sera. The latter is obviously of little value in the absence of a definitely determined etiology. The treatment recommended is bed rest, alkalines, diaphoresis, moderate catharsis and prevention of chilling.

To the general practitioner or the internist the book has little practical value. To the epidemiologist or one doing investigative work it is indispensable.

CLEMENT R. JONES, JR., M. D.

Applied Anatomy: By Gwilym G. Davis, M. D., 9th ed. Philadelphia, J. B. Lippincott Co., 1934. pp. 717.

This is the ninth edition of a book which for a long time has been a popular text for junior and senior medical students. It has been completely revised by Dr. George P. Muller. Several chapters have been entirely rewritten by his co-editors and a number of new illustrations appear. Less kin to surgery than anatomy, the text well covers the essentials of anatomy necessary to the student and practitioner of surgery. To the student it is a review of anatomy on his approach to surgery with enough indication of the necessity of anatomic knowledge in the performance of surgical procedures to make the study of the anatomic facts more interesting, more desirable.

The volume undoubtedly will continue to enjoy its popularity. Dr. George P. Muller deserves credit for improving an already excellent book.

HOWARD R. MAHORNER, M. D.

Hamlet, An Analytic and Psychlogic Study: By Fayette C. Ewing, M. D. Boston, Stratord Company, 1934. pp. 32. Price $.50.

The author, Dr. Fayette C. Ewing, a physician, practicing in Louisiana, lends his analytical study of Shakespeare to the discussion of the mental responsibility or sanity of the character Hamlet. Whether the Bard of Avon meant to depict Hamlet as an insane nobleman or whether he represented him as assuming the role of being mentally afflicted is not always agreed upon by those who study the tragedy. The question of whether Hamlet was sane or insane can be depended upon to bring about much discussion. This study by Dr. Ewing gives a thorough analysis of the character of Hamlet, and is presented in a most delightful style. I can not recall a character sketch that approaches in excellence this one, both as to the close study of the character and the correctness of interpreting the various moods and actions of Hamlet. The observations and conclusions drawn represent correct psychiatric study and interpretation. Dr. Ewing concludes, and to my mind proves beyond doubt, that the poet created Hamlet sane, but had him assume the role of mental irresponsibility for the purpose of avenging the death of his father and the reprehensible conduct of his mother.

Not being a Shakesperian scholar of any pretention, the reviewer feels that he does not do justice to this analytical and psychological study, but he has read it with much delight. Dr. Ewing has studied Shakespeare for more than fifty years, and has seen Hamlet enacted almost twenty times by the best Shakesperian players of several decades. In addition to his ability as a Shakesperian scholar, the author possesses a very pleasing style. This study is heartily recommended for anyone interested in Shakesperian works.

C. S. HOLBROOK, M. D.

Veterinary Helminthology and Entomology: the Diseases of Domesticated Animals Caused by Helminth and Arthropod Parasites: By H. O. Monnig, B. A., Dr. Phil., B. V. Sc. Baltimore. Wm Wood and Co., 1934. Illustrated, pp. 402.

This volume provides for the first time an English manual dealing with the helminth and arthropod diseases of domestic animals. It is an authoritative text on both the technical and clinical aspects of these infections and is characterized by an accurate, impartial, up-to-date presentation of data in a clear, understandable manner.

There is an abundance of excellent text figures, most of which are original. In addition there are twelve good half-tone plates. Complete host reference lists are presented immediately following the body of the text. Very few typographical or technical errors have crept into the volume. The absence of a bibliography is the only serious criticsm.

For the scientific veterinarian this book is an invaluable daily *vade mecum;* for the physician and clinical laboratorian it is an important reference text.

ERNEST CARROLL FAUST, Ph. D.

Institutional Care of Mental Patients in the United States: By John Maurice Grimes, M. D., Chicago, 1934. pp. 138. Price $3.00.

At the eighty-first annual session of the American Medical Association at Detroit in June, 1930, the House of Delegates, after appropriate resolutions, requested the Council of Medical Education

and Hospitals to make a thorough investigation of all hospitals caring for mental patients. To direct this work, Dr. John Maurice Grimes was appointed, and was assisted by two other physicians, with adequate clerical facilities. Because of dissatisfaction the report of the investigation was never published by those who authorized it. The present volume is presented by Dr. Grimes, and he has personally assumed the financial responsibility for publication. It was felt that this was the only way in which the results of the investigaton could be saved from oblivion. Undoubtedly a splendid piece of work has been accomplished, but unfortunately the report is so condensed that it can not be reviewed in detail.

In the United States there are 631 institutions concerned with the care and treatment of mentally sick patients: These institutions were investigated personally and by means of questionnaires. These 631 hospitals carry the full daily service of 2,337 physicians, 7,339 nurses, and 38,790 attendants. The total patient population is almost half a million (445,867). There were admitted 147,621 patients during the year covered by the report. Of these 631 institutions, 351 are owned and controlled by governmental agencies, including federal, state, county, and city governments, and they contain 85% of all the mental patients. The other 251 institutions are owned and controlled by private agencies, including churches, independent associations, and individuals. The report, for purposes of description and comparison, divides the institutions into (1) The Publicly Controlled Institutions, 351, and (2) The Privately Controlled Institutions, 251.

The report describes the State institutions as to size, adequacy, capacity, physical construction of the hospitals, the farms that are usually a part of the plant, the medical units, and various other aspects and activities of these hospitals. While there is, on the whole, a woeful lack of facilities for the care of those mentally ill, the trend is toward improvement. I am impressed with the mildness of terms used in describing the existing conditions and the fairness of the criticism.

The Federal institutions (24) have a capacity of 18,961 patients. They are comparatively new and are, therefore, much better equipped than the State Institutions, some of which are well over a century old. The personnel of physicians and nurses is much larger, comparatively, than that of the State hospital, and the per diem cost is much greater, therefore the service is better.

The privately controlled institutions, in number 280, with a bed capacity of only 20,183, are small and many of their beds are unoccupied. The privately endowed hospitals have been leaders in proper hospital care of the mentally ill patients, and they have set standards that should be striven for by all other hospitals.

The last 27 pages of the report are given over to a discussion of special considerations, in which various aspects of the study are taken up and discussed in a very comprehensive manner.

This work is probably the most extensive and most authorative that has ever been made, and should be carefully studied by those interested in the institutional care of mental patients in the United States.

C. S. Holbrook, M. D.

Tumors of the Female Pelvic Organs: By Joe Vincent Meigs, A. B., M. D., F. A. C. S., N. Y., The MacMillan Co., 1934. 261 illus. pp 533.

This book gives the incidence and type of treatment from an unusually large group of cases, such as is possible from the Massachusetts General Hospital, and is of real value for that reason. It shows an enormous amount of compilation of statistics, and will no doubt serve as an excellent guide to one who is dealing with the history, and histological changes of tumors of the pelvic structures. The treatment has been emphasized, and it is authoritative, since it has been carried out by a group of men of great experience. The illustrations are well worthy of emphasis, and add greatly to the pathological descriptions in the text.

C. Jeff Miller, M. D.

PUBLICATIONS RECEIVED

J. B. Lippincott Company, Philadelphia: Body Mechanics, by Joel E. Goldthwait, M. D., LL. D.; Lyold T. Brown, M. D., Loring T. Swaim, M. D., and John G. Kuhns, M. D.

Charles C. Thomas, Springfield, Ill. and Baltimore: Medical Tactics and Logistics, by Colonel Gustavus M. Blech, and Colonel Charles Lynch. The Clinical Aspects of Visceral Neurology, by W. K. Livingston, M. D.

W. W. Norton & Company, Inc., New York: American Medicine, by Dr. Henry E. Sigerist.

Paul B. Hoeber, Inc., New York: How to Practice Medicine, by Henry W. Kemp, M. D.

The Lancet Press, New York: Sculpture in the Living, by Jacques W. Maliniak, M. D.

Yale University Press, New Haven, Conn.: The Doctor in History, by Howard W. Haggard.

U. S. Government Printing Office, Washington, D. C.: Annual Report of the Surgeon General of the Public Health Service of the United States, 1934.

Report on Seventh International Congress of Military Medicine and Pharmacy and Meetings of the Permanent Committee, by Captain William Seaman Bainbridge, MC-F., USNR.